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expectations, satisfaction, and appropriateness of their programs
in education at Andrews University**

Rampasan, Libin Kutup, Ph.D.

Andrews University, 1988

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Andrews University
School of Education

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GRADUATES' EXPECTATIONS, SATISFACTION, AND
APPROPRIATENESS OF THEIR PROGRAMS IN
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A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Libin Kutup Rampasan
October 1987


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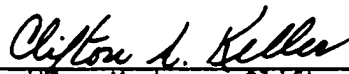
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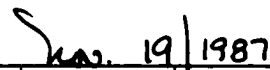
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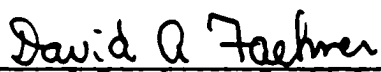

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ABSTRACT

**COMPARISON OF INTERNATIONAL AND AMERICAN DOCTORAL
GRADUATES' EXPECTATIONS, SATISFACTION, AND
APPROPRIATENESS OF THEIR PROGRAMS IN
EDUCATION AT ANDREWS UNIVERSITY**

by

Libin Kutup Rampasan

Chairman: Edward E. Streeter, Ed.D.

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

**TITLE: COMPARISON OF INTERNATIONAL AND AMERICAN DOCTORAL
GRADUATES' EXPECTATIONS, SATISFACTION, AND
APPROPRIATENESS OF THEIR PROGRAMS IN
EDUCATION AT ANDREWS UNIVERSITY**

Name of Researcher: Libin Kutup Rampasan

Name and degree of chairman: Edward A. Streeter, Ed.D.

Date completed: October 1987

Problem

The proportion of international students in the doctoral programs, School of Education at Andrews University, raises concerns over (a) the ability of the programs to meet the varied expectations and needs of the international and American students and (b) the relevance of the students' academic preparations to their careers.

Possible differences between the international and American doctoral graduates' appraisals of their programs were investigated.

Method

This ex-post facto study obtained data from two sources: AU's records and the graduates' responses to survey questionnaires sent to 143 of the 151 doctoral graduates with known addresses. A 72.7% return rate was attained.

Chi-square statistical analyses were conducted on 235 items to test four null hypotheses. Alpha was set at .05

Results

The background information revealed that there were more international graduates (52.7%) than American graduates (47.3%); 80.8% were men; most (90.1%) were Seventh-day Adventists; and 79.5% received the Ed.D degree.

Only 31 of the 235 items were statistically significant.

Conclusions

1. International doctoral students attend AU mainly because it is an Adventist institution; American students choose to attend because of geographic proximity.

2. The doctoral programs were compatible with the pre-arrival expectations of the graduates.

3. Graduates were generally satisfied with their programs and rated favorably the faculty, facilities, quality of instruction, dissertation writing process, and the programs' contributions to acquired competencies.

4. American graduates perceived the School of Education as catering adequately to the needs of the international doctoral students. International graduates were less inclined to agree.

5. In terms of professional development, the graduates benefited most from dissertation work, course work, relation to major professor or director of dissertation, and independent reading. They benefited least from relationships with other students, preparation for examination, graduate and research assistantships.

6. The majority were satisfied with the relevance of their academic preparations to their professional careers.

7. The high percentage of international doctoral students in the School of Education appears to have little negative impact on their programs or the Americans' perception of the programs.

8. The minimal number of differences between international and American appraisals may be largely due to two common factors: their Adventist backgrounds and current employment with the Adventist denomination.

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CHAPTER I

INTRODUCTION

There has been a steady increase in the number of international students attending institutions of higher learning in the United States of America since the end of World War II (Jenkins, 1983, p. 9). According to the reports released by the Institute of International Education (1982, 1985), an average of 15,000 international students attended American colleges and universities in the 1940s. During the 1984-1985 school year the official count climbed to 342,113, representing 2.6% of the total enrollment in the United States. The American Council on Education (1982, p. 44) predicted that there will be a million international students in the United States by the end of this century. Du Bois (1956), Ceislak (1955), and Han (1975) found varied reasons why international students came to the United States of America. According to them, the majority came for the simple desire to further their studies at American institutions of higher learning.

The United States government, for its part, has continued to welcome and even foster the arrival of international students to the country. Springer (1969, pp. 17-27) noted that the concept behind this practice are: (1) foreign study is beneficial and necessary in the national interest, since it contributes to international understanding, as well as the individual's greater proficiency in his

chosen field; and (2) there exists a community of interest among all parties involved in student exchanges: the student, the government, the university, and the financial sponsor.

According to Mestenhauser (cited in Althen, 1983) "the general concept that international educational exchange was a good thing, with political, economic and humanitarian outcomes" evolved after the second world war during an era when: (a) the United States was obviously superior to the rest of the world in economic and technical strength, (b) foreign students on American campuses were few, (c) there was a prevailing idea that people everywhere would benefit from exposure to American education and technology, (d) it was believed that the foreign students would return home and assume leadership positions in their countries, and (e) international contacts were seen as a means to promote international friendships.

However, the presence of international students on American campuses inevitably raised questions and concerns. One such concern was the relevance of American education to their work in their own countries (Jenkins, 1983, p. 10; Cooper 1983, pp. 277-284). Preliminary studies conducted in the 1960s (Gollin, 1967; Susskind & Shell, 1968; Vorapipatana, 1967) on international graduates of various technical and academic programs indicated that the majority of the graduates, upon returning home, made considerable use of their American training. Practical aspects of their learning programs were perceived as more relevant to their needs in their own countries than the theoretical academic aspects.

Another concern was the ability and willingness of educational institutions to address the varied educational

expectations and needs of international students. According to the National Liaison Committee on Foreign Students Admission (1971), most institutions of higher learning knew little about their international students' educational welfare, resulting in continued indifference to their needs. According to Goodwin and Nacht (1983), this indifference was in direct proportion to the number of international students in the institution.

The Council of Graduate Schools (1969, p. 6) noted that a university

. . . should have a 'critical mass' of foreign students in order to gain perspectives, set its goals, marshal its resources, and evaluate its effort. It would be impossible for a university with a handful of students from a few scattered countries to have a program of significant impact on its role or objectives.

Goodwin and Nacht (1983) observed that the percentage of international students within a department, school, or institution had to be at least 15% in order to gain the attention of college or university officials. Nevertheless, they charged that very few American colleges and universities had any coherent procedures for dealing with their international students. This, they contended, was deplorable considering that international students were already outnumbering American students in some graduate fields.

Goodwin and Nacht (1983) noted the dilemma surrounding the presence of international students on campus: with none, the institution might be perceived as too provincial and not competing for the world market; with too many, the program might be perceived as out of fashion and suffering from declining domestic demand. There was a consensus among faculty members and administrators that student bodies with more than 50% international students were

undesirable and "warped," while those with 70% or more were in crisis. The feeling was that "30% felt good while 40% was uncomfortable" (p. 21).

One educational institution that has its fair share of international students is Andrews University. It is a co-educational institution operated by the Seventh-day Adventist (SDA) Church. The University is located on a 1,600-acre campus at Berrien Springs, in lower southwestern Michigan. During the 1984-1985 school year, it had an enrollment of 3,034 full-time students, representing all the states of the United States of America, the protectorates of the Caroline Islands, Puerto Rico, and the Virgin Islands, and over 80 countries, thus giving it an international outlook (Andrews University, 1985, pp. 12-19). In addition, 905 students were enrolled in 10 of its extension schools abroad (Coetzee, personal communication, 1985). The report issued by the Department of Education Office for Civil Rights (1984, pp. 13-24.) showed that the university had the third highest percentage of international students (22.4%) among American colleges and universities with enrollments of 2,500 or more. The University comprises six schools: the College of Arts and Sciences, the College of Technology, the School of Business, the School of Education, the School of Graduate Studies, and the Theological Seminary. The University also operates an academy and an elementary school.

The educational ideals of the University are based on the philosophy that

True education means more than the pursual of a certain course of study. It means more than a preparation for the life that now is. It has to do with the whole being, and with the whole period of existence possible to man. It is

the harmonious development of the physical, the mental, and spiritual powers. It prepares the student for the joy of service in this world and for the higher joy of wider service in the world to come. (White, 1952, p. 13)

These ideals are encapsulated in the motto of the university: "Corpus"--(striving for physical well-being), "Mens"--(striving for mental excellence), and "Spiritus"--(striving for spiritual maturity) (School of Education Bulletin, 1984-1986, p. 3).

In harmony with these high ideals, Andrews University initiated a doctor of education (Ed.D) program in 1974 (AU Self-study Report, 1979, p. viii), and the doctor of philosophy (Ph.D.) program in 1982 (School of Education Bulletin, 1984-1986, p. 2). Later development led to the reorganization of the Department of Education into the School of Education in 1983 (School of Education Bulletin, 1984-1986, p. 2).

Institutional data showed that as of the 1986 Summer graduation, international students have comprised 52.3% of the doctoral graduates of the School of Education. As shown in Figure 1 only in 1977, 1980, 1981, and 1986 did American doctoral graduates outnumber international graduates. If this pattern continues, then the higher overall percentage of international students in the doctoral programs can still be reasonably expected within the near future.

The doctoral programs at Andrews University came into existence at a time of increased concern for the welfare and success of the large number of international students in the United States of America. This concern was reflected in the conclusion reached by the the National Liaison Committee on Foreign Student Admission (1971, pp. 54-55) which stated that

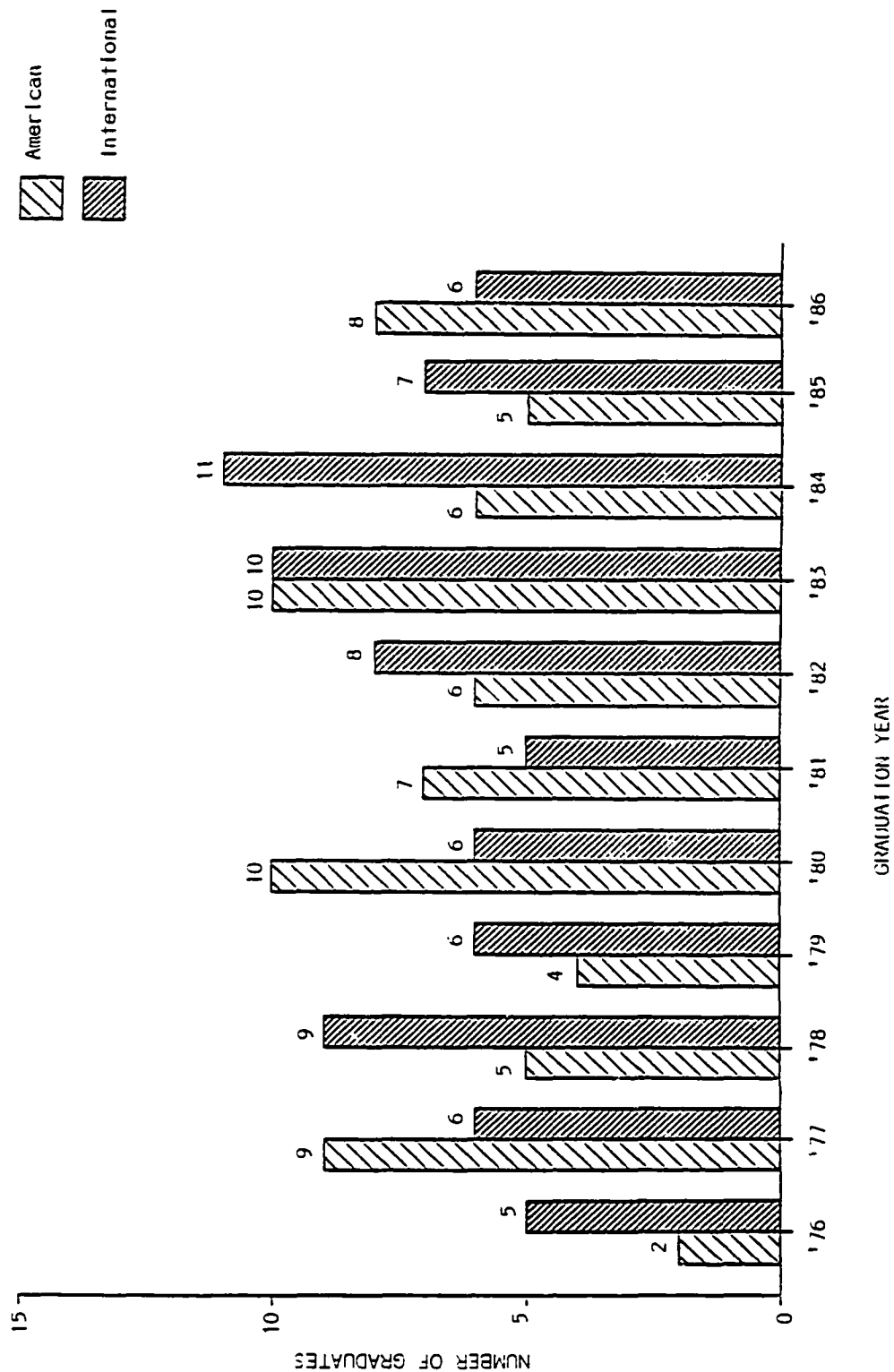


Figure 1. Bar Graph Showing the American and International Doctoral Graduates of the School of Education

Most universities know very little about themselves. They are unaware of how well foreign students do on their own campuses. Universities must set institutional goals and undertake institutional research to see how well foreign students are doing.

With this background in mind, the focus of this study was the comparison between the international and American doctoral graduates' appraisals of their programs in the School of Education at Andrews University in terms of meeting their personal and academic needs and preparing them for their subsequent professional careers.

The doctoral programs of the School of Education at Andrews University represents only a small segment of American higher education. Nevertheless, the composition of its student body presents an opportunity for studies such as this to examine issues of concern to cross-cultural education in general and specifically to administrators, policy makers, curriculum planners, and teachers of institutions which choose to welcome international students on their campuses. The information gathered by this study should help provide guidelines or directions for meeting the educational expectations and needs of a multinational student body.

Statement of the Problem

The proportion of international students in the doctoral programs of the School of Education at Andrews University raises concerns over (a) the ability of the School to meet the varied expectations and needs of its international and American students, and (b) the relevance of the students' academic preparation to their subsequent professional careers.

This study attempted to address the above concerns by investigating possible differences between the international and

American doctoral graduates' appraisals of the doctoral programs. The differences considered were in terms of: the ability and adequacy of the programs to satisfactorily meet students' expectations and needs, to prepare them for their subsequent professional careers, and the relevance of students' academic preparation to their careers. This study also represented an effort to address the paucity of empirical research dealing with the potential differences in the way American doctoral programs in education affect international and American students.

As far as can be determined, no study has yet been undertaken to compare the international graduates' appraisals of their doctoral programs in education in the United States of America with those of their American counterparts. Similarly, no documented study of this nature has been undertaken for the doctoral programs of the School of Education at Andrews University.

Purpose of the Study

The purposes of this study were:

1. To compare the international doctoral graduates' retrospective appraisals of the doctoral programs of the School of Education at Andrews University with those of the American graduates.
2. To propose strategies and guidelines that can help institutions of higher learning, such as Andrews University, deal effectively with the varied problems, expectations, and needs of a multinational student body at the doctoral level.

Theoretical Framework

The theoretical framework of this study was provided by the concept of cybernetics as applied to the individuals and their organizations.

Feedback and the Educational System

Parsons (1967) conceptualized the formal educational system as a system comprising of three aspects according to functions or responsibilities: (a) the technical system, (b) the managerial system, and (c) the community or institutional system. He further pointed out that under such a system the teaching function would be considered a part of the technical system.

A system, such as the school system, has an environment to interact with (Baker, 1973). In the case of the school system, students and graduates (consumers of education) are part of the environment (Parsons, 1967, p.43).

Central to the survival of a system is the concept of "entropy" (death or disorganization) versus "negentropy" (the act of combating "entropy"). An open living system such as the school system can combat the tendency towards "entropy" by receiving feedback from its environment. (Baker, 1973; Lonsdale, 1964; Immegart, 1969; Morphet, Johns, & Reller, 1974)

Lonsdale (1964, p. 173) defined feedback as "the process through which the organization learns: it is the input from the environment to the system telling it how it is doing as a result of its output to the environment." Feedback has also been conceptualized as cyclic in nature (Baker, 1973; Lonsdale, 1964; Pfiffner & Sherwood, 1960). In essence, the cycle consists of the

flow of information from consumers about a certain product to the product-processing point, which then reacts to the information and subsequently comes up with the desired product for the consumers. The cycle is repeated as the consumers react and provide feedback about the latest product.

An important ingredient of feedback is the element of satisfaction. Barnard (1939, pp. 22-45) first theorized that a "system of cooperation" consisting of two or more individuals exists because there is "an objective, a purpose, an aim" to attain and achieve. Usually distinctions can be made between the motives of the individuals (efficiency) and the objectives of the system (effectiveness). The system's success and continued existence depends on: (a) the accomplishment of the system's objectives and (b) the satisfaction of the motives of the individuals who make up the system. In this respect, an educational institution can be viewed as a "system of cooperation." One that needs to attain its own objectives as well as satisfy its students needs.

The institution needs to know, through constant feedback from its students and graduates, whether its goals and the students' needs are being satisfactorily met. Concepts from Tyler (1950), Blackburn & Lingenfetter (1973), Grush & Costin (1975) reinforce the suggestion that two good sources of environmental input for a school system are its students and graduates. Tyler (1950), in particular, acknowledged the learner as a source of educational objectives, which according to him were the heart of any educational endeavor.

Morphet, Johns, & Reller (1974, pp.62-63) hypothesized that if a system (such as an educational institution) does not learn from

its environment, it will either cease to exist in the environment or the environment will force it to change. Thus, an educational system survives on a continuous flow of information from its environment. The information gathered become the basis for adjustments and changes within the system in order to be able to serve the environment better and perpetuate its own existence.

Lonsdale (1964) and Brown (1973) pointed out that feedback to the system can only be effectively useful if: (1) the system is sensitized to the importance of feedback for survival; (2) the system has the mechanism to obtain the information from the environment; (3) cost factors such as availability of resources, time, etc. are considered; (4) the information gathered has strategic, managerial, and technical attributes; and (5) the system has an information agency operating as a kind of clearing house to integrate, evaluate, compare and disseminate the right information to the appropriate subgroups.

Chin (1969, pp. 297-312) noted that "any system has a tendency to achieve a balance among the many forces or factors operating upon the system and within it." An environmental feedback causes a disturbance in the system. Chin (1969, p. 205) theorized that a system react to an environmental feedback by: "(1) resisting the influence of the disturbance, refusing to acknowledge its existence, or by building a protective wall against the intrusion, and by other defensive maneuvers; (2) by resisting the disturbance through bringing into operation the homeostatic forces that restore or re-create a balance; and (3) by accommodating the disturbance through achieving a new equilibrium."

Lonsdale (1964) proposed that an organization is best served if administrators lead it to respond by the third method, which is to adapt to changes in the environment. Just as the feedback is central to the survival of a system, the system's ability to adapt to changes that are suggested by the environment is also crucial. In Gabarro's (1973, p. 196) words, "The problem of organizational adaptation to change has become central to the survival of organizations in contemporary society."

Lawrence and Lorsch (1967, 1969) assumed that organizations segment themselves into subgroups. Each subgroup would then concentrate on one aspect of the organization's work and environment. From these assumptions they theorized that (1) segmentation required that the efforts of the various segmented parts be integrated to make the organization viable and (2) segmentation resulted in cognitive differentiation among members of the different parts of the organization. They later showed empirically that in order for organizations to be successful in their effort to adapt to a changing environment, they must attain a higher states of differentiation and integration among the subgroups.

Peters and Waterman (1982) concluded from their studies of "excellent" companies that for the 1980s and the foreseeable future, organizations' attention to their consumers will be even more crucial for survival. The nature of the organization-consumer relation will separate the successful companies from the struggling ones. They stressed that successful companies are usually characterized, among other things, by their ability to learn from the people they serve. By listening to consumers intently and regularly, the company gain

insight into what it takes to satisfy them. The desire and ability to constantly and consistently satisfy the consumers have been found to be the major force behind the success of today's thriving enterprises (Peters & Waterman, 1982; McClenahan & Pascarella, 1987; Russell, 1987).

Peters and Austin (1985) drew a list of organizational characteristics and activities deemed important to organizations that care about their consumers. Among the salient points made were: (1) the concept that the consumers are important pervades every functions in the organization; (2) devices are instituted to listen to consumer feedback; (3) Quantitative and qualitative surveys are conducted regularly; (4) consumer feedback are considered vital and are taken seriously and then acted upon; and (5) there is an obsession with going the extra mile for the consumers.

The doctoral graduates of the School of Education are conceptualized in this study as integral parts of the School's environment. The multinational graduates, by themselves, present a varied and rich environment when their nationalities, race, culture, needs, expectations, etc. are considered. Their responses to the questionnaires of this study constitute their feedback to the system that produced them. In this respect, this study could contribute to empirical understanding and justification for educational system's continued effort to learn from its students and graduates, which in this case, is a multinational doctoral student body.

Hypothesis of the Study

The hypotheses of this study were concerned with the differences between the international doctoral graduates' appraisals

of their programs in the School of Education at Andrews University and those of the American doctoral graduates. The hypotheses are:

1. There is no significant difference between the international and American students' expectations of the doctoral programs prior to the commencement of their studies.

2. There is no significant difference in the levels of satisfaction experienced by international and American graduates in terms of the actual programs offered.

3. There is no significant difference in the professional growth experienced by international and American graduates after their doctoral studies.

4. There is no significant difference in the perceived appropriateness of the international and American graduates' academic preparation for their post-doctoral professional careers.

Delimitation of the Study

1. The study was limited to a comparison between the international and American graduates' appraisals of their doctoral programs in the School of Education at Andrews University.

2. Since the inception of the doctoral programs in 1974 until the 1986 Summer graduation, 151 students have received doctoral degrees. They comprised the total population under study.

3. The graduates' responses were treated in the context of the 1974-1987 time-frame, which denotes the elapsed period between the inception of the doctoral programs and the time the graduates were surveyed.

Limitation of the Study

The study had the following limitations:

1. The accuracy and integrity of the graduates' responses to the questionnaires which were assumed and accepted.
2. The inherent limitation of the questionnaires.
3. The influence of cultural difference on the openness of responses to questions that are deemed sensitive.

Significance of the Study

According to Blackburn and Lingenfetter (1973), an appraisal of a program from without can be uncomfortable, but nevertheless, important, especially if the program intends to maintain a standard of excellence. An appraisal usually brings forth new ideas and thus helps generate vitality and vigor to a program. It can also serve as a stimulant for growth and healthy development and point out areas of weakness as well as avenues for future strength. It may also help dispel untested assumptions and beliefs long taken for granted.

Blackburn and Lingenfetter (1973) further stated that "An obvious means of evaluating an enterprise of any kind is to ask those it serves for their opinions. The 'consumers' of doctoral education are students. . . ." (p. 15)

Grush and Costin (1975, pp. 55-56) also concluded that students were indeed the consumers of education, and their perceptions and satisfactions were relevant outcomes of the educational process.

The anticipated significance of the information gathered and the findings thereof of this study were as follows:

1. The study should help add to the growing body of knowledge on cross-cultural education in general and, more specifically, contribute to better insight and understanding of international students who wish to pursue doctoral studies in this country. Hopefully the experience of their predecessors will help highlight for them and the institutions those factors or aspects of doctoral studies that can have significant impact on the students' perceptions, personal lives, and future professional careers.

2. Studies like this should provide universities such as Andrews University, which admit international students to their doctoral programs, with information and guidelines on how best to meet the needs and expectations of international students without compromising their commitment to their American students.

Definition of Terms

For this study the following terms were defined:

American Graduates -- graduates who were citizens or permanent residents of the United States prior to pursuing their doctoral studies.

Appraisal -- the process of determining the quality and effectiveness of the doctoral programs.

AU -- Andrews University.

Doctoral Program -- course of study leading to a Ph.D. or Ed.D. degree.

Graduates -- individuals who have completed the graduation requirements of the doctoral programs in the School of Education and have received their doctoral degrees. Other terms such as alumni,

doctoral graduates, doctoral degree recipients, participants, and respondents are synonymous to this term.

International Graduates -- graduates who came from countries other than the United States of America. The term **foreign** is used synonymously with the term **international**.

International Students -- students from countries other than the United States of America, usually holding student visas such as F1, F2, and J1.

Multinational Students -- A student body comprising of students from the host country as well as from other countries.

SDA -- Seventh-day Adventist.

Organization of the Dissertation

This study is organized as follows:

Chapter 1 includes the introduction, statement of the problem, purpose of the study, theoretical framework hypotheses of the study, delimitation and limitation of the study, significance of the study, and the definition of terms.

Chapter 2 presents the review of literature. Special emphases are given to (a) the background and profile of the doctoral graduates, (b) studies on international doctoral graduates and international students in general, (c) studies on doctoral graduates' appraisals of doctoral programs in education and higher education in general, and (d) studies on international students of SDA Universities.

Chapter 3 describes the research methodology used to gather data, the population, and the treatment of obtained data.

Chapter 4 presents the data analyses.

Chapter 5 is comprised of the summaries of findings, discussions, and conclusions. Recommendations are also presented.

CHAPTER II

REVIEW OF THE LITERATURE

To serve the purpose of this study, the review of the literature covered the following areas:

1. Background and profile of the doctoral degree recipients of American universities.
2. Studies done on international recipients of doctoral degrees granted by American universities and other related studies on international students attending American colleges and universities.
3. Follow-up studies on graduates of doctoral programs in education and on their appraisals of the programs.
4. Related studies on Adventist universities.

Background and Profile of Doctorate Degree Recipients

The National Research Council (1978) in a longitudinal study of doctoral graduates covering the period from 1875 to the mid 1970s reported that: (a) doctoral graduates generally came from well-educated families; (b) about 14% of all doctoral graduates were foreigners with the proportion being less in the area of education; (c) the median age of the graduates at graduation was 30 years, although graduates in education tended to be older; (d) the proportion of women had been steadily increasing, and (e) the main

sources of financial support for the graduates were: their own earnings, teaching or research assistantships, and spouses' earnings.

Yearly updates by the National Research Council (1981, 1982, 1983, 1986) revealed a significant increase in the proportion of women receiving doctorate degrees. In the field of education, women outnumbered men for the first time in 1983. The percentage of international graduates had increased to 16%.

The study also determined that geographic proximity, availability of desired programs, and institutional reputation were the main influences in the selection of institutions by the graduates.

Studies Done on International Graduates and Students

The lack of studies solely on international doctoral graduates' appraisals of their doctoral studies/programs in education could be attributed to the insignificant proportion of international graduates in most universities in this country. According to Goodwin and Nacht (1983), international students usually ranked low on the list of priorities of most colleges and universities. Interest in them was proportional to their percentages within departments or schools. When these percentages exceeded 15 or 20% of the student body, marked interest was shown.

Shinouda (1966) was among the first to study the appraisal of doctoral programs in education by international graduates. His data were gathered from a population of 75 international doctoral graduates of the School of Education, Indiana University, Bloomington, Indiana. The main purposes of the study were to examine

the reaction of international doctoral graduates to certain aspects of the doctoral program, to assess the professional value of the program to the graduates, and to provide suggestions and recommendations to the School of Education.

According to Shinouda (1966), problems encountered by the graduates at the university were "student problems" and were on an individual basis. It took the average student about six months to overcome these problems. Students who lacked English language proficiencies took two semesters to remedy these deficiencies. In addition, he found that course work, dissertation projects, and student-professor relationship were perceived as the most valuable aspects of the program. The least valued were guidance and counselling by advisors. The international graduates in general wished more flexibility had been given to pursue subjects related to their own countries.

A vast majority of the respondents faced re-adjustment problems upon returning home. However, for the most part they reported attaining higher positions with better pay resulting in financial gain and improved social status.

Cajoleas (1958) conducted a study on 156 international doctoral graduates of Columbia University. His objective was to determine the after-effects of their stay in the United States and their professional development thereafter. Data for this study were obtained from records in the registrar's office and from responses to mailed questionnaires.

Cajoleas (1958) found all the respondents gainfully employed. The majority were teaching in universities and reported attaining

higher positions than those held before their doctoral study. The most frequently cited benefits gained from their academic program were increased professional competence, knowledge, and insight; better foreign relations; general self-improvement; and higher social and professional status. Those who returned home indicated facing problems and frustrations in (a) re-adjusting personal values, (b) trying to bring about desired changes, (c) re-adjusting to the standard of living in their own countries, and (d) gaining acceptance and recognition for their American training and degrees.

In a study to examine the goals and problems of graduate students from the Far East (mostly China, Japan, and Korea) at the University of Southern California (USC), Han (1975) found that their goals were overwhelmingly educational in nature rather than cultural, and their greatest problems had to do with the English language.

Eighty percent of those who responded to the questionnaire item on whether they would recommend USC to another international student indicated that they would not for a variety of reasons, including: high tuition, undesirable school environment, too many international students, and unfriendly students.

A nation-wide study of international students in American colleges was undertaken by Ceislak (1955). Although not based on international doctoral students in particular, the findings from this study provided the researcher with interesting insights into international students in general. According to Ceislak (1955), their reasons for selecting a particular institution were (in order of frequency): program offerings, the selection had been made for them by their sponsor or agency, institutional reputation,

scholarship, recommendations by relatives or friends, relatives lived near the university, and the church affiliation of the university. Roughly 30% were not attending the university of their first choice.

Ceislak (1955) contended, however, that

Whatever the specific reasons for their choice, the school concerned has agreed to number them among its students and is, hence, bound to help them, in every way feasible, to achieve their objectives for coming. The kind and extent of aid provided by institutions to the foreign students depend, in large measure, on two factors: the number of these students on campus and the basic philosophy of the school in dealing with them. (p. 93)

He also came to the conclusion that the best help for international students who had just arrived on campus was orientation to life in the United States--both on-campus and off-campus--and to the institution itself.

Althen (1980) concurred with Ceislak when he stated that "Providing orientation for newly arrived foreign students is considered to be one of the main responsibilities accepted by an educational institution that admit students from abroad." According to him the goals of orientation should be:

1. To provide information that American students already possess.
2. To provide foreign students with help in learning to gather information--academic and social--on their own.
3. To provide the new student with help in understanding and learning to deal with American students, faculty, and staff--including the Foreign Student Advisor.

Althen (1980) put it more concisely when he suggested that the categories of information to be provided should include:

information about practical matters, about the American academic system, and ideas about adjusting to a new culture.

A study on international students and higher education in the United States sponsored jointly by the Carnegie Endowment for International Peace and the Institute of International Education was undertaken by Cora Du Bois (1956). She concluded that "no single and simple factor is operative in the heterogeneous impulses that move men and women to study beyond the boundaries of their homeland." However, she added that

The goals and motives of foreign study must be educational. But we must understand education in its broadest sense--as both formal and informal learning experiences. Whenever the foreign students, or his American sponsor, injects goals or motives that are inappropriate or irrelevant to education, broadly conceived, or uses education as an instrument to other ends, there is the risk that the good and ancient tradition of study abroad will be damaged. (p. 17)

According to Du Bois (1956, pp. 55-65), the following represented some of the unique cultural values held by most Americans that international students would not only have to understand but adjust to while studying in the United States: (a) virtue of work, (b) sociocentrism, (c) education for all, (d) egalitarianism, (e) materialism, and (f) friendship low on obligation. Du Bois (1956) also concluded that understanding of such American cultural patterns by international students constituted one of the functions of orientation and student counselling.

Morris (1960) was able to shed more light onto these adjustment problems when he conducted a study of the international students at the University of California, Los Angeles (UCLA). He made the following generalizations:

1. When an international student was resentful and disdainful of most Americans, it was likely that (a) he felt most Americans did not have a high regard for his country. This was aggravated by American stereo-typing and ignorance about his country, (b) his comparison of his country or other foreign countries with the United States was either biased or based on facts ambiguous to him, (c) he perceived America as very different in many important ways, and (d) he experienced being overly identified as a foreigner.

2. If he was generally favorable toward America and its people but nevertheless dissatisfied with his sojourn, the reasons could be: (a) his lack of American friends or social life, (b) his lack of previous international travel had not prepared him to adjust to new situations, (c) he faced language difficulties either socially or academically or both, (d) academic difficulties might have in turn caused general dissatisfaction, and (e) the contrast between his country and the United States was so glaring that he was unable to adjust to or enjoy life here.

3. If he was dissatisfied academically but nevertheless happy with his stay, it could be: (a) he had lost some academic credits, standing, or status upon his arrival here. His new colleagues might not have as high a regard for his academic abilities as his former classmates or teachers, and (b) the educational system and procedures were so different from those he was used to that he found it hard to understand and accept them.

Stewart (1972) pointed out another problem faced by international students. He contended that American instructors might have expectations that the international students find hard to accept

or fulfill. For instance, the "participatory atmosphere and relative equality" in the American classroom was rather unique and unusual for most international students. He also added that American instructors frequently complained that international students lacked analytical thinking. It was found that in contrast to their American and European counterparts, most international students' papers, theses and dissertations were descriptive in nature. According to Stewart (1972), this pattern might largely be due to societal background and not to ability per se.

In another study, Shaffer and Dowling (1966) further helped shed light on the social adjustments of international students. He compared a group of American students at Indiana University who were named by international students as their friends with another group at the same university who were not mentioned as their friends. One of the objectives of the study was to identify characteristics of American students whom international students were able to make friends with. It was found that friendship among international and American students was based upon common interest and environmental proximity rather than on the nationality of the international students or background of the American students. American students who befriended international students were naturally socially active and well-integrated. They also discovered that informal and spontaneous meetings had better chances at creating friendships than formal campus or community activities. The friendships formed on campus did not, however, necessarily extend beyond the campus setting.

A panel comprised mostly of graduate deans met at Racine, Wisconsin, in 1967 under the sponsorship of the Council of Graduate Schools (1969) to compare notes and concerns for the international students in the United States. Their observations pointed towards the needs for educational institutions to look critically at themselves in relation to the influx of international students to their campuses. They concluded that:

1. The best guarantee that a graduate student's academic need would be met was to pre-evaluate his need and then select the institution that had the "program fit."

2. The university should provide adequate student services and, when possible, financial support. For example, services to the student's accompanying family.

3. The university concerned should evaluate its position and policies on such matters as finance, admission, student services, curriculum, etc., on a continuous basis. The university should also evaluate its long-term commitment to its international students.

4. The university should determine what "critical mass" of international students on campus can create an impact on the university.

Baghban (1981) compared the satisfaction perceived by 1980 international and American graduates of Iowa State University regarding working conditions, compensation, quality of education, social life, and recognition during their period of study. Seventy items of the College Student Satisfaction Questionnaire (CSSQ) were used to survey 80 international and 80 American students. Responses were tabulated on a 1-5 Likert-type scale. The T-test was used to

determine the significance of differences in their responses. Generally, American students were observed to be significantly more satisfied with their college life. Significant differences were also found on social life and working conditions with American students responding more positively. Social life appeared to be the area that gave international students the most dissatisfaction, followed by working conditions. The findings held true for the variables: residence and marital status.

Jones (1971) attempted to determine how international alumni used and valued the education they received from American universities by sending questionnaires to 409 international graduates of the University of Northern Colorado and the University of Denver.

Jones (1971) concluded that the value to an international student of his American education was not only in the academics but in the total experience. While a degree from the United States might have helped him obtain a better and higher paying job, the same would have happened anyway if his education was from another country. In some countries, however, the prestige of his American education had noticeably changed his life for the better.

Jones' (1971) study was typical of the follow-up studies on foreign alumni of American colleges or universities that Orr (1971) reviewed. The purpose of his review was to discover patterns and influencing factors in the students' experience after their return home. Another purpose was to examine the issues of: personal changes, readjustment to the home country, returnees' use of American learned skills and knowledge, and the effectiveness of returnees as agents of cultural exchanges.

Orr (1971) found that the majority of the foreign students who studied in the United States were men (80 - 90%), and usually came from middle or upper socio-economic classes. Their median age at departure time to the U. S. was 30 years. Most of them were married. Eighty percent of the students from developing countries were employees of their government.

According to Orr (1971) returnees indicated that they were more flexible, insightful, sensitive to others, self-confident, and generally had broader political and social awareness. Factors that influenced such changes were: age, duration of stay in America, fields of study, and the degree to which they accepted American mores.

The students also went through a readjustment phase upon returning home. Many felt heightened patriotism for their countries, but at the same time experienced anxiety about their acceptance.

Seventy to seventy-five percent of the returnees were able to use at least "some" of their acquired skill. Eighty percent of the returnees claimed to have conveyed information to others in the home country through informal and personal communication. Those with higher status indicated having conveyed such information through formal methods such as lectures, publications, etc.

According to Orr (1971) the majority of the returnees estimated that their foreign experience had no major impact on their careers. They felt that the impact was either neutral, somewhat positive, or somewhat negative, depending on the field of study and country of origin. It was also found that those who went to the U.S. with the least status attributed more importance to U.S. education.

Follow-up Studies on Doctoral
Graduates in Education.

This section reviews studies on doctoral graduates. Except for Vandermeulen (1974), the rest of the studies are somewhat similar in scope in that each focused on a single selected institution. All of them utilized survey questionnaires to determine the graduates' retrospective appraisals of their programs or schools.

An in-depth study was conducted by Vandermeulen (1974) to determine doctoral graduates' motives, their perception of the programs, and their aspirations. A total of 2,246 doctoral graduates from 127 participating American and Canadian institutions were surveyed. Vandermeulen (1974) found that the most significant motives for pursuing a doctorate were opportunities for greater self-fulfillment, desire to become better practitioners, potential for new positions, and the desire to work in college settings. The least important motives were interest in careers involving research competence, desire for higher salaries, and desire for prestige associated with the doctorate.

Doty (1962) surveyed 429 doctoral graduates of the School of Education, Indiana University, for the express purpose of evaluating the quality and effectiveness of the doctoral program. The study found that the majority of the graduates believed their degrees contributed to promotions, increase in salaries, and increase in peer and social acceptance. Aspects of the program named by respondents as most valuable were relationship to major professor or director of dissertation, course work, dissertation work, independent reading, and teaching assistantship. Least valuable were preparation for examinations and relationship with other students. Doty (1962) felt

that there was justification in concluding that, in general, graduates held the program in high esteem.

In a somewhat similar study, Taber (1969) attempted to (a) determine how doctoral graduates in education viewed various aspects of their training and study experience, (b) identify patterns for completion of their degree, and (c) determine similarities or differences of background, origins, abilities, and other attributes of the graduates. Data were obtained by sending questionnaires to all students who had graduated with doctoral degrees in education from Southern Illinois University (SIU) during the period 1960-1968. The questionnaires pertained to their course work, research tools, preliminary examinations, dissertations, oral defense of dissertations, faculty-student interaction, and general aspects of the program.

The findings were: (a) there was no significant correlation between the elapsed time in completing the degree requirements and the extent of satisfaction or endorsement of the program; (b) the median duration of the doctoral study was 45 months; (c) most of the students were enrolled on a full-time basis; (d) correlation between scholastic ability test results and grade point-averages were low; and (e) the graduates were generally supportive and satisfied with the doctoral program at SIU and felt the program fulfilled its functions to help enhance scholarship and develop critical and analytical thinking.

Maneenil (1981) replicated a 1974 study on the appraisal of the doctoral program in higher education at North Texas State University (NTSU). The main objectives were to determine the

doctoral students' and graduates' reactions to the program and to measure the extent of similarities to or differences from the previous study. The data gathered showed that: (a) 70% of the graduates were males; (b) 65% graduated with Ph.D. degrees compared to 67% with Ed.D. degrees in the previous study; (c) the majority of the students were masters graduates of the university; (d) a majority (58%) of the graduates rated the program above average; (e) the majority would also choose NTSU if they were to start all over again; and (f) all of the respondents felt professionally competent and found the curriculum appropriate. However, they felt that residency, competence in statistics, and proficiency examination requirements should be decreased.

Barker (1972) undertook a study to assess the Miami University (Ohio) educational administration doctoral program since its inception in 1968 and compare the findings with similar national studies conducted by the American Association of Colleges for Teacher Education (AACTE) and the Carnegie Foundation. It was found that the strongest point of the program was the professor-student interaction. The weakest was the program administration and structure. During the period under study, the Ed.D. degree program had virtually disappeared from the university program.

Nigro (1973) also conducted a similar study at Michigan State University (MSU) by surveying the graduates of 1965-1972. Questions were constructed around a fixed alternate response designed to elicit respondents' perceptions of their doctoral programs. Open ended and closed questions were included. Seventy percent indicated no desire to change the program. The most common complaints among the

respondents were that instruction contained too much theory and not enough "nuts and bolts."

Plawecki (1974) undertook a study to determine the graduates' appraisal of a selected department of the School of Education at the University of Iowa and concluded that all courses were not equally valuable and, therefore, some should be reviewed, updated, or deleted. Financial assistance was a major influence in the graduates' decision to pursue the doctorate at the University. The graduates saw the language requirement as an unnecessary obstacle placed before them.

In another study conducted by Christiansen (1975) at the University of Utah, she found that: (a) students preferred the continuation of the Ed.D. program over the Ph.D. program; (b) the Ed.D. program was highly successful in preparing the graduates for positions of responsibilities they occupied; and (c) core courses, internship, dissertation, selective admission requirements, and prior experience were perceived as indispensable to the program.

Blackwell (1972) surveyed the 1952-1970 doctoral graduates of Florida State University in an attempt to investigate the strengths and weaknesses of the various doctoral programs of the university. The investigation was based on the attitude and opinions of the graduates regarding the adequacy and appropriateness of their graduate training.

Questionnaires were sent to 1,512 doctoral graduates. A 55.8% return rate was obtained. The data obtained were computer coded for analysis.

The median age of the graduates was 32 years. The majority of them (82.3%) were males, and about the same percentage (82.2%) were married. About 40% of the graduates were thoroughly satisfied with their current job, while 43.4% were satisfied but would consider a change.

Proposed changes responded to by at least 50% of the graduates were:

1. Graduate students should be encouraged to substitute courses in two or three non-major fields for the minor.
2. Provide more college teaching in graduate programs.
3. Provide more interdisciplinary graduate seminars.
4. More doctoral dissertations should be the type that analyze, integrate, and interpret existing knowledge.
5. Language requirements should be optional according to 62.3% of the graduates. Another 17.3% thought the requirement was obsolete and should be abolished.

The overall doctoral program drew ratings of excellent from 35.5% of the respondents, while 49.9% of them rated the program as good. In general the strengths of the various programs were centered on the faculty, major professors, and research experience. "The faculty of the various departments constituted the heart of the doctoral program." The cited weaknesses were foreign language requirements, lack of training for college teaching, inadequate course work, and excessive course work.

**Related Studies on Seventh-day Adventist
Universities**

Two studies conducted on Adventist universities were found and selected for review. Both studies pertained to international students and their academic stay at these universities.

Van Nijkerk (1975) surveyed existing services available to international students at Andrews University. He analyzed the perceptions held by the international students, faculty, and international alumni about the services available to international students. Questionnaires were sent to 85 faculty and staff, 64 international alumni, and 119 international students. Data were computer coded, and statistical analyses were done by multivariate and contingency techniques.

Van Nijkerk's (1975) findings included the following:

1. The vast majority of the international students and international alumni were Seventh-day Adventists.
2. They did not have adequate knowledge of what services were available to them or of the procedures of utilizing them.
3. There were complaints about the lack of practical experience offered in the curricula.
4. Significant differences existed between faculty and staff perceptions of the services and those of the international students and alumni. The faculty and staff had a higher or more positive expectation of the services.
5. Some departments needed to project a more pleasant and friendly image to make the international students feel welcome.

6. The international students were generally satisfied with the services available at Andrews University even though some needed improvement.

Among the recommendations that Van Nijkerk (1975) proposed were the following:

1. The university should re-evaluate its commitment to its international students.

2. Andrews University should identify key individuals--preferably AU alumni--who could help future international students in their pre-arrival orientation.

3. Pre-arrival and on-arrival orientation and support should be given serious attention. Comprehensive information on available services should be provided to these students.

4. The university should provide affordable courses such as cooking, sewing, etc., to other members of the students' families.

5. Financial assistance, e.g., scholarships, should be made available to the international students.

6. The university should study the feasibility of a pre-return orientation program.

Faehner (1980) conducted a study on the perception of campus life at Loma Linda University (LLU) according to five ethnic-international student groups. Specifically, the purpose of the study was to identify satisfaction levels and psycho-social attitudes of Afro-American, Anglo-American, Asian-American, Mexican-American, and International students at the university. The College Student Questionnaire (CSQ), supplementary questions, and personal interviews were utilized to gather data. Furthermore, LLU students were

compared to the national norms according to the same questionnaire. Some of the results were as follows:

1. Affiliation to the Seventh-day Adventist faith appeared to render a unique homogeneity to the otherwise multi-cultural student body, and hence there were very few differences in their perception of the campus environment.

2. Afro-Americans were less satisfied with campus life. They also showed greater peer independence and a higher level of social conscience and liberalism.

3. Anglo-Americans were significantly less liberal than their Afro-American counterparts, and less satisfied with the religious life at the university.

4. Asian-Americans showed the greatest dependency on their families and peers.

5. Mexican-Americans had the highest satisfaction level of all the ethnic groups.

6. International students, on the other hand, showed no particular tendencies. They were observed to be at a lower level than Afro-Americans on "social conscience."

7. Compared to their national counterparts, LLU students were significantly more dependent on their families and peers, more conservative, more socially aware, and less culturally sophisticated.

Summary

This chapter reviewed literature related to this study. The reviewed literature covered four areas:

1. Background and profile of the doctoral degree recipients of American universities.

2. Studies done on international recipients of doctoral degrees granted by American universities and other related studies on international students attending American colleges and universities.

3. Follow-up studies on graduates of doctoral programs in education and on their appraisals of the programs.

4. Related studies on Adventist universities.

The literature revealed that doctoral graduates generally came from well-educated families. They usually completed their doctoral studies while they were in their early thirties, although graduates in education tended to be older. Geographic proximity and the availability of desired programs tended to weigh heavily in their decision to pursue their doctorate at a chosen institution.

The 1980s saw a steady increase in the proportion of women doctoral graduates. In the field of education, women outnumbered men for the first time in 1983. The proportion of international graduates also grew.

Among the problems faced by international students at all levels were: (1) the use of the English language, (2) re-adjustment problems associated with being in a new place and country, and (3) different educational expectations and procedures. Proper orientation was thought of as the most significant procedure in helping to mitigate these problems.

International students were reported to have experienced readjustment problems upon returning home. However, the majority of them were gainfully employed in better and higher paying positions.

Studies on education doctoral graduates revealed that, in retrospect, the graduates thought very well of their programs. The

majority of them were satisfied with their programs. They also believed their doctoral studies adequately prepared them for the positions they were holding.

The most cited motives for pursuing the doctorate were: opportunity for greater self-fulfillment, desire to become better practitioners in their fields, the possibilities for new positions, and the desire to work at the college level.

The graduates' criticisms about their programs were varied. Among them were complaints about the language requirements, lack of practical experience, and the residency and statistics requirements. The graduates also perceived the faculty as the heart and strength of any doctoral program.

Two studies pertaining to international students at two Adventist universities were found and reviewed. The studies found that the overwhelming majority of the students at these Adventist universities were Seventh-day Adventists. This common factor rendered a unique homogeneity to the otherwise multi-cultural student body. The minimum differences in the students' perception about their campus environments were directly attributed to this common factor.

CHAPTER III

METHODOLOGY

The purpose of this study was to compare the international and American doctoral graduates' retrospective appraisals of their programs in the School of Education at Andrews University. Of particular concern to this study was the ability of the School of Education to satisfactorily meet the needs of its multi-national doctoral students and the relevance of the graduates' education at Andrews University to their professional careers.

This chapter presents a description of the type of research utilized in this study, its population, the methods of data collection, and data analyses.

Type of Research

This was an ex post facto type of study to compare the international and American doctoral graduates of the School of Education at Andrews University. The graduates were categorized as international and American graduates solely on the basis of their nationality prior to or while studying for their doctorates.

The graduates were surveyed for their appraisals of the doctoral programs from which they graduated. Attempts were then made to compare and describe as accurately and factually as possible the opinions and perceptions of the graduates about certain aspects of their doctoral programs.

Population

A computer search done by Andrews University Institutional Research Office identified 151 doctoral graduates of the School of Education since the inception of the doctoral program in 1974 to the 1986 Summer graduation. The 151 doctoral graduates constituted the total population of this study.

Further investigations revealed that one of the graduates was deceased thus reducing the total population to 150. Seven others had no known addresses, further reducing the viable population to 143 graduates. Of the 143 graduates, 67 (46.9%) were identified as Americans, and 76 (53.1 %) as international graduates.

Data

Data for this study were obtained from two primary sources:

1. Data kept by Andrews University. The data examined for this study were on: countries of origin, gender, marital status, religion, age, area of concentration or specialization, and grades. These data were obtained from the University's own Institutional Research Office.

2. Responses to mailed questionnaires.

Questionnaires

Mailed questionnaires are the most commonly used research instrument in education and the behavioral sciences due to the ease and low cost of their administration. Specifically, the cited advantages of the mailed questionnaires are: economy, wide-range, self-administration, the simplicity with which they can be made clear, and anonymity. Caution in their use, however, is advised

based on the possibilities of a low return rate, questions being ambiguous and misunderstood, and the lack of assurance that the responses are actually from the addressees (Isaac & Michael, 1981, p. 128-130).

According to Tuckman (1978, p. 196-197) questionnaires are utilized to convert information directly given by individuals into quantitative data. Through this procedure, it is possible to quantify a person's knowledge, likes or dislikes, attitudes and beliefs, etc.

For this study, the choice and utilization of mailed questionnaires were based on the nature of the study and the international placement of the population.

The Questionnaire Construction

The questionnaire was constructed using the following procedures:

1. Reviews of related literature, surveys, and questionnaire instruments were undertaken to provide insight and guidelines.
2. Permission was obtained from Dr. Gerald Doty (1962) to use in part or whole his questionnaire, which was used to survey the doctoral graduates of the School of Education at Indiana University, Bloomington, Indiana. A modified version of this instrument was eventually used. Items deemed inappropriate were deleted. Conversely, other concepts and items drawn from Shinouda (1966), Taber (1969), Nigro (1973), Vandermeulen (1974), and Christiansen (1975) were added.
3. The resulting questionnaire was submitted to a panel of five judges for content validity verification. The panel consisted

of: the Director of the Institutional Research Office, the Dean of the School of Education, a doctoral candidate from the School of Education, a professor from the Department of Research and Statistical Methodology, and a professor from the Department of Educational Administration.

4. The revised questionnaire was then pilot tested. Twelve advanced doctoral students of the School of Education participated in the pilot study. This facilitated further refinement of the questionnaire. A total of 235 items were included in the final version.

5. Approval for the questionnaire (appendix A) was sought and obtained from the doctoral committee.

Mailing of Questionnaires

A questionnaire packet was sent on February 9-10, 1987, to each of the 143 graduates with known addresses. The packet contained:

1. A personalized cover letter from Dr. Stanley Chace, the Dean of the School of Education at Andrews University
2. A personalized instructional letter from the researcher
3. A questionnaire
4. A stamped return envelope for subjects with United States addresses. Subjects with foreign addresses were each provided with an "AIR MAIL"-stamped return envelope. In addition an amount of US\$1.00 was enclosed to cover the return postage expense.

Post cards and letters of reminder were subsequently sent to those who had not yet returned their responses. During the data

collection period, three graduates personally indicated their refusal to respond on personal and legal grounds.

As of the cut-off date of May 10, 1987, 104 graduates had returned their responses. This represented an overall return rate of 72.7%.

Treatment of Data

Demographic data on the 151 doctoral graduates of the School of Education were obtained from Andrews University through its Institutional Research Office. These data were downloaded from the Xerox mainframe computer to an IBM Personal Computer. The data were formatted as Coma Separated Values (CSV) and were converted to SuperCalc 3 Version 2 file. This facilitated tabulation and computations. Descriptive analyses were subsequently done based on the data of all 151 graduates.

Responses to the questionnaire items by the 104 respondents were computer coded and input into data files on Andrews University's Xerox mainframe computer. The selection or non-selection of a given alternative response was treated as "yes" or "no" responses and computer coded as 1 and 0, respectively. Responses to the open-ended questions were managed separately using a dBase III Plus data base management software on a micro-computer.

Hypotheses

The four null hypotheses of this study were:

1. There is no significant difference between the international and American students' expectations of the doctoral programs prior to the commencement of their studies.

2. There is no significant difference in the levels of satisfaction experienced by international and American graduates in terms of the actual programs offered.

3. There is no significant difference in the professional growth experienced by international and American graduates after their doctoral studies.

4. There is no significant difference in the perceived appropriateness of the international and American graduates' academic preparation for their post-doctoral professional careers.

In addition, criticisms and suggestions for changes on certain aspects of the doctoral programs were sought from the graduates.

Statistical Analyses

Chi-square statistical analyses were conducted to test the hypotheses. Each hypothesis was tested with alpha set at .05. The Xerox configured version of the Biomedical Computer Programs P-series (BMDP) statistical package facilitated the analyses. The BMDP1F Frequency Tabulation Module produced contingency tables and provided chi-square computational results. Responses to each questionnaire item were statistically compared between the two groups. Yate's corrected chi-square values were used for all 2x2 tables (2 rows and 2 column , $df = 1$) with expected cell frequencies of less than 5.

Probability values of less than .05 resulted in the rejection of the hypothesis of no significant difference. However, there were questionnaire items, whose chi-square and probability values were statistically non-significant, that elicited consensus of opinions from the graduates as a single group. A consensus of opinion was

deemed reached when at least two-thirds (66.67%) of the graduates were in agreement. In such instances, attempts were made to determine and present the collective opinions of the graduates.

Summary

This chapter described the type of research utilized in this study, its population, the methods of data collection and data analyses.

An ex post facto type of study was used to compare the international and American doctoral graduates' appraisals of their doctoral programs in the School of Education at Andrews University. The 151 doctoral graduates of the School of Education since its inception to the 1986 Summer graduation constituted the population of this study. Data were obtained from two sources: the Institutional Research Office of Andrews University and the graduates' responses to mailed questionnaire. Survey questionnaires were sent to the 143 graduates with known addresses. A 72.7% return rate was attained.

Item-by-item chi-square statistical analyses with alpha set at .05 were conducted to determine differences between the international and American graduates' responses.

The results of the data analyses are presented in chapter 4.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The major findings of this study are presented in two parts. First, the analyses of the background information on the population of 151 doctoral graduates of the School of Education at Andrews University are presented. Second, the results of the statistical comparisons between the international and American graduates' responses to the questionnaire are presented.

Background Information of the Population

The background information on the 151 graduates was made available for this research through the Institutional Research Office of Andrews University.

Table 1 shows the graduates' countries of origin and their distribution according to gender for each country. The graduates came from 47 countries. Thirty percent of the American graduates were women. The international graduates on the other hand were predominantly men (91.1%).

Table 2 shows the distribution of the graduates according to the two groupings--American and international graduates. Seventy-two (47.7%) were identified as Americans and 79 (52.3%) were from other countries.

TABLE 1

THE GRADUATES' COUNTRIES OF ORIGIN

NAME OF COUNTRY	MALE	% OF ROW TOTAL	FEMALE	% OF ROW TOTAL	TOTAL GRADUATES
United States	51	69.4	22	30.6	72
Antigua	1	100.0		.0	1
Argentina	3	100.0		.0	3
Australia	3	100.0		.0	3
Austria	1	100.0		.0	1
Bahamas	3	100.0		.0	3
Barbados	1	100.0		.0	1
Belize (Br. Honduras)	1	100.0		.0	1
Bermuda	0	.0	1	100.0	1
Brazil	2	100.0		.0	2
Canada	4	100.0		.0	4
Colombia	1	100.0		.0	1
Egypt	1	100.0		.0	1
England	2	100.0		.0	2
Fiji Island	1	100.0		.0	1
France	1	100.0		.0	1
Grenada	1	100.0		.0	1
Haiti	1	100.0		.0	1
Iceland	1	100.0		.0	1
India	3	100.0		.0	3
Indonesia	4	100.0		.0	4
Iran	1	100.0		.0	1
Ivory Coast	1	100.0		.0	1
Jamaica	3	75.0	1	25.0	4
Japan	1	100.0		.0	1
Kenya	1	100.0		.0	1
Malawi	1	100.0		.0	1
Malaysia	4	66.7	2	33.3	6
Mauritius	2	100.0		.0	2
Mexico	1	100.0		.0	1
New Zealand	2	100.0		.0	2
Nicaragua	1	100.0		.0	1
Nigeria	1	100.0		.0	1
Norway	1	100.0		.0	1
Panama	1	100.0		.0	1
Philippines	0	.0	1	100.0	1
Portugal	2	100.0		.0	2
Rwanda	1	100.0		.0	1
Singapore	0	.0	1	100.0	1
South Africa	5	100.0		.0	5
Spain	2	100.0		.0	2
Sri Lanka	0	.0	1	100.0	1
Switzerland	1	100.0		.0	1

TABLE 1--Continued

NAME OF COUNTRY	MALE	% OF ROW TOTAL	FEMALE	% OF ROW TOTAL	TOTAL GRADUATES
Taiwan	1	100.0		.0	1
Tanzania	1	100.0		.0	1
Trinidad & Tobago	2	100.0		.0	2
Zimbabwe (Rhodesia)	1	100.0		.0	1
INTERNATIONAL TOTAL	72	91.1	7	8.9	79
TOTAL	122	80.8	29	19.2	151

TABLE 2

DISTRIBUTION OF AMERICAN AND
INTERNATIONAL GRADUATES

STATUS	NUMBER	PERCENT
American	72	47.7
International	79	52.3
TOTAL	151	100.0

Table 3 shows the marital status of the graduates. The majority (92.7%) of the graduates were married. Singles, divorcees, and widows accounted for the other 7.3%.

Table 4 shows the religion of the graduates. The majority of the graduates (90.1%) were Seventh-day Adventists. Almost all of the international graduates (98.7%) were Adventists. Fifty-eight (80.6%) of the American graduates were identified as Adventists and the rest (19.4%) were from other denominations.

The age distribution of the graduates is shown in Table 5. The average age of the graduates was 43.4 years. The average age of the international and American groups were 43.5 and 44.5 years, respectively. Two of the graduates had no reported birth date.

Table 6 shows the degrees obtained by the graduates. During the period under study, 120 (79.5%) Ed.D. degrees were conferred. Only 31 (20.5%) received the Ph.D. degree. This was probably due to the fact that the School of Education did not begin conferring the Ph.D. degrees until 1982. The distributions of graduates with Ed.D. degrees according to their programs were: Educational Administration and Supervision (46), Education and Counseling Psychology (38), and Religious Education (36). Similarly, Ph.D. degree recipients were distributed as follow: Education and Counseling Psychology (11) Religious Education (10), Educational Administration and Supervision (9), and Curriculum and Instruction (1).

The academic performance of the graduates as evidenced by their Cumulative Grade-Point Average (CGPA) is shown on Table 7. In general, the graduates did well academically. The international and American graduates' mean CGPA were almost identical at 3.63 and 3.65,

TABLE 3
MARITAL STATUS OF THE GRADUATES

MARITAL STATUS	AMERICANS		INTER-NATIONALS		TOTAL	
	#	%	#	%	#	%
Single	6	8.3	2	2.5	8	5.3
Married	64	88.9	76	96.2	140	92.7
Divorced	2	2.8	0	.0	2	1.3
Widowed	0	.0	1	1.3	1	.7
TOTAL	72	100.0	79	100.0	151	100.0

TABLE 4
RELIGION OF GRADUATES

RELIGION	AMERICANS		INTER-NATIONALS		TOTAL	
	#	%	#	%	#	%
Seventh-day Adventist	58	80.6	78	98.7	136	90.1
Others	14	19.4	1	1.3	15	9.9
TOTAL	72	100.0	79	100.0	151	100.0

TABLE 5
AGE OF GRADUATES AT GRADUATION

AGE OF GRADUATES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
UNKNOWN	1	1.4	1	1.3	2	1.3
<30	1	1.4	3	3.8	4	2.7
30 - 34	7	9.7	13	16.5	20	13.2
35 - 39	12	16.7	19	24.0	31	20.5
40 - 44	23	31.9	8	10.1	31	20.5
45 - 49	10	13.9	19	24.0	29	19.2
50 - 54	15	20.8	9	11.4	24	15.9
55 - 59	3	4.2	6	7.6	9	6.0
60 & +	0	.0	1	1.3	1	.7
TOTAL	72	100.0	79	100.0	151	100.0
AVERAGE AGE	44.5		43.5		43.4	

TABLE 6
DEGREES/MAJOR OF GRADUATES

DEGREES/MAJOR	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
ED.D. DEGREES						
Educ. Admin. & Supervision	24	33.3	22	27.9	46	30.5
Educ. & Coun. Psychology	24	33.3	14	17.7	38	25.2
Religious Education	11	15.3	25	31.7	36	23.8
PH.D. DEGREES						
Curriculum & Instruction	1	1.4	0	.0	1	.7
Educ. Admin. & Supervision	1	1.4	8	10.1	9	6.0
Educ. & Coun. Psychology	6	8.4	5	6.3	11	7.2
Religious Education	5	6.9	5	6.3	10	6.6
TOTAL ED.D. DEGREES	59	81.9	61	77.3	120	79.5
TOTAL PH.D. DEGREES	13	18.1	18	22.7	31	20.5
TOTAL OF ALL DEGREES	72	100.0	79	100.0	151	100.0

TABLE 7
CUMULATIVE GPA OF GRADUATES

CUMMULATIVE GPA	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
3.95 - 4.0	5	6.9	7	8.9	12	8.0
3.85 - 3.94	11	15.3	12	15.2	23	15.2
3.75 - 3.84	9	12.5	5	6.3	14	9.3
3.65 - 3.74	14	19.4	10	12.7	24	15.9
3.55 - 3.64	15	20.8	15	19.0	30	19.9
3.45 - 3.54	6	8.3	14	17.7	20	13.2
3.35 - 3.44	4	5.6	6	7.6	10	6.6
3.25 - 3.34	3	4.2	8	10.1	11	7.3
3.15 - 3.24	2	2.8	0	.0	2	1.3
3.05 - 3.14	2	2.8	0	.0	2	1.3
3.0 - 3.04	1	1.4	0	.0	1	.7
UNKNOWN	0	.0	2	2.5	2	1.3
TOTAL	72	100.0	79	100.0	151	100.0
AVERAGE GPA	3.65		3.63		3.64	

respectively. Sixty-eight percent of the graduates had CGPAs equal to or above 3.5.

Questionnaire Results

Out of the 143 graduates who were surveyed for this study, 104 completed and returned their survey questionnaires (Table 8). This represented an overall return rate of 72.7%. Fifty-one (76.1%) American graduates responded, and 53 (69.7%) international graduates did likewise.

The findings presented in this chapter are based on the responses of the 104 graduates to 235 items in the questionnaires. These items fall under four categories of concern: (1) the students' expectations of the doctoral programs, (2) the actual programs and the graduates' satisfaction with them, (3) the graduates' post-doctoral professional growth, and (4) appropriateness of academic preparations to their professional careers. The following hypotheses dealt with the four concerns above.

1. There is no significant difference between the international and American students' expectations of the doctoral programs prior to the commencement of their studies.

2. There is no significant difference in the levels of satisfaction experienced by international and American graduates in terms of the actual programs offered.

3. There is no significant difference in the professional growth experienced by international and American graduates after their doctoral studies.

TABLE 8
NUMBER AND PERCENTAGE OF QUESTIONNAIRES
SENT AND RECEIVED

GRADUATION YEAR	# SENT		# RECEIVED		PERCENTAGE OF RETURN RATE	
	AM.	INT.	AM.	INT.	AM.	INT.
1976	2	5	2	3	100.0	60.0
1977	7	6	5	4	71.4	66.7
1978	4	9	3	8	75.0	88.9
1979	3	6	2	3	66.7	50.0
1980	9	6	4	2	44.4	33.3
1981	7	5	5	2	71.4	40.0
1982	6	8	5	7	83.3	87.5
1983	10	8	7	6	70.0	75.0
1984	6	11	5	9	83.3	81.8
1985	5	6	5	5	100.0	83.3
1986	8	6	8	4	100.0	66.7
TOTAL	67	76	51	53	76.1	69.7

4. There is no significant difference in the perceived appropriateness of the international and American graduates' academic preparation for their post-doctoral professional careers.

In addition, criticisms and suggestions for changes on certain aspects of the programs were sought from the graduates.

Item-by-item statistical comparisons of the two groups' responses were conducted using a chi-square analysis with the level of significance set at .05. Throughout this section, statistically significant items are analyzed and described in detail first. This is followed by the descriptions of statistically non-significant items that elicited consensus of opinions from the graduates as a group.

Expectations From Doctoral Programs

This section was concerned with what the graduates wanted out of their doctoral studies, and what they knew of the programs prior to commencing their doctoral studies. The results of the statistical test on Hypothesis One are presented.

Hypothesis One

There is no significant difference between the international and American students' expectations of the doctoral programs prior to the commencement of their studies.

There were 11 questions with 58 items that addressed this hypothesis: They were questions 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7, 8, and 9. Table 9 shows the values for chi-square (χ^2), degrees of freedom (df), and the probability. The asterisks on the right-hand column denote statistically significant items. Thirteen items with significant differences were found and subsequently rejected. This

TABLE 9
THE CHI-SQUARE (χ^2) TABLE OF QUESTIONS
GROUPED UNDER HYPOTHESIS ONE

Questions	χ^2	df	P	* <.05
3. A) What led you to decide to pursue a doctorate?				
Attraction of new kinds of positions	8.961	1	.003	*
Better opportunity for promotions	4.298	1	.038	*
Desire to be a better practitioner in your field	.000	1	1.000	
Enhanced prestige associated with a doctorate	4.815	1	.028	*
Desire to learn new techniques, procedures, and skills in your field	1.955	1	.152	
Desire to keep up-to-date in your field	.327	1	.567	
Stimulation of university setting	.021	1	.834	
Opportunity for greater self-fulfillment	.000	1	1.000	
Fascination with research and experiment	.016	1	.900	
Desire to contribute to the growth of your profession	4.626	1	.0315	*
Appeal of higher salaries	.157	1	.692	
Desire to work with college-age students	.016	1	.898	
Sense of inadequacy with pre-doctoral knowledge and skills	.136	1	.713	
Encouragements by your employer(s)	.707	1	.400	
Other(s)	.313	1	.576	
3. B) What factor influenced you the most? (Please circle one of the above)	16.299	12	.178	
4. A) What factors influenced your decision to pursue the doctorate at Andrews University?				
Housing availability	.138	1	.710	
Lived near Andrews University	22.680	1	.000	*
Availability of desired programs	.988	1	.320	

TABLE 9--Continued

Questions	χ^2	df	P	* < .05
4. A) (continued)				
Availability of financial aids	.035	1	.851	
Size of the University	.002	1	.965	
Advanced credits earned or applicable at AU	.008	1	.927	
Studied at AU before	.372	1	.542	
SDA (Seventh-day Adventist) University	17.961	1	.000	*
Reputation of the School of Education	.000	1	1.000	
Academic reputation of the University	3.178	1	.075	
Reputation of individual staff members	.497	1	.431	
Cost consideration	.000	1	1.000	
Racial/Ethnic makeup of the University	.000	1	1.000	
Family tradition to attend AU	.000	1	1.000	
Influenced by friends	2.908	1	.0382	*
Contact with AU personnel	.117	1	.731	
Suggestions from financial sponsor(s)	2.143	1	.143	
Other(s)	2.578	1	.108	
4. B) What factor influenced you the most? (Please circle one of the above)	28.678	11	.003	*
5. A) Please check the financial resource(s) which made your doctoral study possible.				
Full-time employment while studying	22.749	1	.000	*
Part-time employment while studying	1.385	1	.239	
Fellowship	.001	1	.973	
Assistantship	1.039	1	.308	
Study leave with pay	1.588	1	.208	
Working spouse	2.753	1	.097	

TABLE 9--Continued

Questions	χ^2	df	p	* <.05
5. A) (continued)				
Sponsorship from S.D.A. organization(s)	7.030	1	.008	*
Savings	1.222	1	.269	
Gifts and inheritance	.000	1	1.000	
Loans	.000	1	1.000	
G.I. Bill	No response			
Other(s)	.000	1	1.000	
5. B) Which of the above sources was most significant in amount?	32.164	9	.000	*
6. A) Before coming to Andrews University how much did you know about the following?				
Quality of graduate education	.257	3	.968	
Opportunity for study in your field	1.088	3	.780	
Teaching methods	2.310	3	.511	
Counselling services	2.582	3	.461	
Living arrangements	9.015	3	.029	*
American Educational system	20.118	2	.000	*
6. B) Did AU provide enough information or orientation regarding the items listed above?	.408	2	.816	
7. What misinformation or wrong impression, if any, did you have about graduate education at AU?	5.830	2	.054	
8. Does a Ph.D. degree in education have a higher prestige value in your country than an Ed.D. degree?	.308	2	.857	
9. Would it have been possible for you to earn your doctoral degree in your own country? i.e., if you were an international student at AU	1.999	2	.368	

meant that significant differences existed between the responses of the international and American graduates regarding their expectations of the doctoral programs on these items. Hypothesis One is rejected for these 13 items but retained for the rest of the items. Further analysis of these differences are presented below:

Question 3A. Motives for pursuing the doctorate. As has been shown on Table 9, the graduates' motives for pursuing the doctorates were found to differ on: attraction to a new kind of position, better opportunity for promotions, enhanced prestige associated with the doctorates, and the desire to contribute to the growth of their profession.

Table 10 shows the frequency distribution of the graduates' responses indicating their motives for pursuing the doctorate. While only 28 graduates responded to the item concerning attraction for new kinds of position as a motive for pursuing the doctorate, it did show a larger proportion of American respondents (41.18%) who indicated their desire to go into other kinds of position as a motive. Only 13% of the international graduates indicated this as a motive.

Thirty graduates responded to the item on better opportunity for promotion as a motive for pursuing the doctorate. The differences here is that more American graduates (39.22%) expected to find better opportunity for promotions as a result of the doctorate than did the international graduates (8.87%).

On the item regarding enhanced prestige as a motive for pursuing the doctorate, the number of responses was again low (37). It did give some indication that the American graduates (47.06%) tended to expect their doctorates to bring about enhanced prestige.

TABLE 10
MOTIVES FOR PURSUING THE DOCTORATE

	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
	N=51		N=53		N=104	
Attraction of new kinds of positions	21	41.18	7	13.21	28	26.92
Better opportunity for promotions	20	39.22	10	18.87	30	28.85
Desire to be a better practitioner in your field	35	68.63	36	67.92	71	68.27
Enhanced prestige associated with a doctorate	24	47.06	13	24.53	37	35.58
Desire to learn new techniques, procedures, and skills in your field	31	60.78	40	75.47	71	68.27
Desire to keep up-to-date in your field	26	50.98	31	58.49	57	54.81
Stimulation of university setting	19	37.25	18	33.96	37	35.58
Opportunity for greater self-fulfillment	34	66.67	35	66.04	69	66.36
Fascination with research and experiment	11	21.57	13	24.53	23	23.08
Desire to contribute to the growth of your profession	23	45.10	36	67.92	59	56.73
Appeal of higher salaries	6	11.76	4	7.55	10	9.62
Desire to work with college-age students	16	31.37	15	28.30	31	29.81
Sense of inadequacy with pre- doctoral knowledge and skills	10	19.61	13	24.53	23	22.12
Encouragements by employer(s)	9	17.65	14	26.42	23	22.12
Other(s)	16	31.37	13	24.53	29	27.88

Only about a quarter (24.53%) of the international graduates had the same expectation.

There was also a larger proportion of international graduates (67.92%) who expected their doctorates to prepare them for the task of contributing to the growth of their profession. Only 45% of the American graduates had this expectation. Perhaps, the international graduates saw greater potential for growth of their professions in their own countries, especially those from the developing countries.

It is also shown that except for the "desire to contribute to the growth of your profession" the significant differences in the international and American graduates' responses occurred on items with low responses. The motives most cited by the respondents were: desire to be better practitioners in their fields (68.27%); desire to learn new techniques, procedures, and skills in their fields (68.27%); and opportunity for greater self-fulfillment (66.35%). The graduates appear least motivated by the prospect of higher salaries (9.62%), sense of inadequacy with pre-doctoral knowledge and skills (22.12%), and encouragement by their employers (22.12%).

Question 4A. Reasons for Attending AU. The graduates were also asked to check-mark factors that influenced their decision to pursue the doctorates at Andrews University. Statistically significant differences were found on the following contributing factors: lived near Andrews University, it is a Seventh-day Adventist university, and influence of friends.

Table 11 shows the distribution of graduates who indicated proximity to AU as a factor in their decision to pursue the doctorate there. As might be expected, more American graduates (49.02%)

TABLE 11
 FACTORS (WITH SIGNIFICANT χ^2) THAT INFLUENCED
 GRADUATES' DECISION TO PURSUE THE
 DOCTORATE AT ANDREWS UNIVERSITY

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
	N=51		N=53		N=104	
Live near AU	25	49.02	3	5.66	28	26.92
SDA university	26	50.98	48	90.57	74	71.15
Influenced by friends	3	5.88	10	18.87	13	12.50

decided to attend AU because they happened to live close by. Only three (5.66%) international graduates had a similar reason.

The table also indicates which group of graduates was more likely to attend AU because it is a Seventh-day Adventist university. Only about half (50.98%) of the American graduates attended AU on the basis of its religious affiliation. On the other hand, the overwhelming majority of the international graduates (90.57%) were influenced to attend AU because it is an Adventist university.

Thirteen graduates (12.5%) were influenced to pursue their doctorate at AU by their friends' recommendations. As indicated in Table 11, there were statistically more international graduates (18.87%) who were influenced by their friends to attend AU than American graduates (5.88%).

Question 4B. Best reasons for attending AU. There were also differences in the graduates' opinions as to which of the factors listed in question 4A influenced them the most to attend AU. The differences in their responses were reflective of their earlier responses to question 4A. As shown on Table 12, a higher proportion of the international graduates (57.14%) chose to attend AU because it is a Seventh-day Adventist institution. In comparison, only 19% of the American graduates indicated the same reason. There were more among the American graduates (29.17%) who chose to attend AU because they happened to be living close by.

It is also worthy to note that up to 24% of the total respondents attended AU because of the availability of desired programs or had studied there before. Factors that had none or little influence on the graduates were: Housing availability, size

TABLE 12

FACTORS THAT INFLUENCED THE GRADUATES THE MOST
TO DECIDE TO PURSUE THE DOCTORATE
AT ANDREWS UNIVERSITY

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Housing availability	0	.00	0	.00	0	.00
Lived near AU	14	29.17	1	2.04	15	15.47
Availability of desired program	7	14.59	5	10.21	12	12.37
Availability of financial aids	0	0.00	1	2.04	1	1.03
Size of the university	0	.00	0	.00	0	.00
Advanced credits earned or applicable at AU	1	2.08	1	2.04	2	2.06
Studied at AU before	5	10.42	6	12.25	11	11.34
SDA University	9	18.75	28	57.14	37	38.14
Reputation of the School of Education	0	.00	0	.00	0	.00
Academic reputation of AU	1	2.08	1	2.04	2	2.06
Reputation of staff members	1	2.08	0	0.00	1	1.03
Cost consideration	0	.00	0	.00	0	.00
Racial/ethnic makeup of AU	0	.00	0	.00	0	.00
Family tradition	0	.00	0	.00	0	.00
Influenced by friends	1	2.08	1	2.04	2	2.06
Contact with AU personnel	1	2.08	0	0.00	1	1.03
Suggestion from financial sponsor(s)	2	4.17	4	8.16	6	6.19
Other(s)	6	12.50	1	2.04	7	7.22
TOTAL	48	100.00	49	100.00	97	100.00

of the university, reputation of the School of Education, academic reputation of the university, cost consideration, family tradition to attend AU, availability of financial aids, reputation of individual staff, and contact with AU personnel.

Question 5A. Financial Resources. Differences existed in the way the graduates financed their doctoral studies. Table 13 shows the distribution of graduates who depended on income from full-time employment to finance their doctoral studies. A larger proportion of the American graduates (54.9%) indicated that full-time employment made their doctoral studies possible. Only five (9.43%) international graduates financed their studies with income from their full-time job.

Table 14 shows the distribution of graduates who relied on financial sponsorship from SDA organizations to finance their doctoral studies. The difference found here is that twice as many international graduates (28 or 50.96%) were sponsored than American graduates (13 or 25.49%).

Question 5B. Most source of finance. Consequently, as shown on Table 15, when the graduates were asked which financial resources contributed the most in financing their studies, a higher proportion of American graduates (44.9%) cited full-time employment. Among the international graduates, 42% cited sponsorships from SDA organization(s). In comparison, only five (10.2%) American graduates indicated getting substantial financial help from Adventist organizations. Ten percent of the total respondents reported defraying the cost of their doctoral studies with spouses' income.

TABLE 13

FULL-TIME EMPLOYMENT WHILE STUDYING AS A MEANS
OF FINANCING DOCTORAL STUDIES

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
No	23	45.10	48	90.57	71	68.27
Yes	28	54.90	5	9.43	33	31.73
TOTAL	51	100.00	53	100.00	104	100.00

TABLE 14

SPONSORSHIP FROM SDA ORGANIZATION(S)
FINANCING THE DOCTORAL STUDIES

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
No	38	74.51	25	47.17	63	60.58
Yes	13	25.49	28	50.96	41	39.42
TOTAL	51	100.00	53	100.00	104	100.00

TABLE 15
FINANCIAL RESOURCES THAT CONTRIBUTED THE MOST
TOWARDS FINANCING DOCTORAL STUDIES

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Full-time employment while studying	22	44.90	2	3.85	24	23.77
Part-time employment while studying	4	8.17	3	5.77	7	6.93
Assistanship	1	2.04	3	5.77	4	3.96
Study leave with pay	3	6.12	2	3.85	5	4.95
Working spouse	4	8.17	6	11.54	10	9.90
Sponsorship from S.D.A. Organization(s)	5	10.20	22	42.30	27	26.73
Savings	3	6.12	3	5.77	6	5.94
Gifts and inheritance	2	4.08	1	1.92	3	2.97
Loans	2	4.08	7	13.46	9	8.91
Other(s)	3	6.12	3	5.77	6	5.94
TOTAL	49	100.00	52	100.00	101	100.00

Question 6A. Pre-arrival knowledge. The graduates were given a list of six items and asked to indicate how much they knew about each of them prior to arriving at AU. The list included: quality of graduate education, opportunity for study in their field, teaching methods, counseling services, living arrangements, and the American educational system. Differences in the graduates responses were found on two items: living arrangement and the American educational system.

Table 16 shows a larger proportion of the international graduates (44%) who indicated having only "some" knowledge of the kind of living arrangement they were going to find upon arriving at AU. In contrast, and as might be expected, more of the American graduates (48.89%) knew "very much" ahead of time the kind of living arrangements available to them.

Table 17 indicates how much the graduates knew about the American educational system before arriving at AU. It appears that the American graduates did indeed know more about the American educational system than the international graduates. Seventy-seven percent of the American graduates indicated "very much" knowledge about their system of education, as compared to only 32% of the international graduates. The majority of the international graduates (68%) had only "some" or "little" knowledge of the American educational system.

The graduates' responses, as a group, to the other four items can be seen on Table 18. They have been arranged in order of the combined frequency counts of respondents who had "some" to "much" pre-arrival knowledge on the listed items. The majority of the

TABLE 16
THE GRADUATES' PRE-ARRIVAL KNOWLEDGE OF
LIVING ARRANGEMENTS

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Nothing	8	17.78	5	10.00	13	13.69
Little	7	15.55	9	18.00	16	16.84
Some	8	17.78	22	44.00	30	31.58
Very Much	22	48.89	14	28.00	36	37.89
TOTAL	45	100.00	50	100.00	95	100.00

TABLE 17
THE GRADUATES' PRE-ARRIVAL KNOWLEDGE OF
THE AMERICAN EDUCATIONAL SYSTEM

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Nothing	0	0.00	0	0.00	0	0.00
Little	3	6.25	11	22.00	14	14.29
Some	8	16.67	23	46.00	31	31.63
Very Much	37	77.08	16	32.00	52	54.08
TOTAL	48	100.00	50	100.00	98	100.00

TABLE 18
THE GRADUATES' PRE-ARRIVAL KNOWLEDGE OF CERTAIN
OTHER ASPECTS OF THE DOCTORAL STUDIES

	NOTHING		LITTLE		SOME		VERY MUCH		TOTAL	
	#	%	#	%	#	%	#	%	#	%
Opportunity for study in your field	3	2.94	18	17.65	47	46.08	34	33.33	102	100.00
Quality of graduate education	7	6.86	16	15.69	49	48.04	30	29.41	102	100.00
Teaching methods	14	14.14	24	24.24	39	39.40	22	22.22	99	100.00
Counseling Service	26	26.80	33	34.02	30	30.93	8	8.25	97	100.00

graduates had a fair amount of knowledge about the quality of education, and opportunity for studies in their fields before arriving at AU. In effect, the majority of the graduates experienced only minimal surprises upon arrival.

Consensus of opinion

Further investigation of the contingency tables of the other questions in this section revealed consensus of opinion among the graduates on questions 6B and 8. Question 9 was directed solely at the international graduates. Their responses are also presented. Under this subsection, the graduates are treated as a single group.

Question 6B. Pre-arrival information. Andrews University's practice of sending out adequate information to its prospective students may have contributed to the lack of surprises in question 6A above. When asked if AU provided them with enough pre-arrival information, the majority of the graduates (73.27%) thought it did (Table 19). Fifteen (14.85%) graduates reported receiving insufficient information, and another 12 (11.88%) were uncertain.

Question 8. Prestige of Ph. D. programs. The graduates were asked if the Ph. D. degree in education is more prestigious than the Ed. D. degree in their countries. Table 20 shows the distribution of the graduates' responses. Seventy (67.3%) graduates assessed the Ph.D. degree to be more prestigious. Seventeen (16.35%) were uncertain, and another 17 (16.35%) said "no." The graduates did not necessarily obtain the degree they perceived as more prestigious--the Ph.D. degree (see table 6). This was perhaps due to the fact that the Ph.D degree was not offered until recently in 1982.

TABLE 19

THE GRADUATES' OPINIONS AS TO WHETHER
AU PROVIDED ADEQUATE PRE-
ARRIVAL INFORMATION

RESPONSE	NUMBER	PERCENT
No	15	14.85
Uncertain	12	11.88
Yes	74	73.27
TOTAL	101	100.00

TABLE 20

THE GRADUATES' OPINIONS OF WHETHER A PH.D.
DEGREE IN EDUCATION HAS HIGHER
PRESTIGE VALUE THAN AN ED.D.
DEGREE IN THEIR COUNTRIES

RESPONSE	NUMBER	PERCENT
No	17	16.35
Uncertain	17	16.35
Yes	70	67.30
TOTAL	104	100.00

Question 9. The doctorate in graduates' own countries. This question was directed at the international graduates to ascertain if they could have earned their doctorate in their own countries instead. Their responses are shown on Table 21. Twenty-two (42.32%) said that they could not have pursued the same doctoral degrees in their countries. Eleven (21.15%) were uncertain, and another 19 (36.54%) said they could have indeed obtained the doctorate in their own countries.

The Programs and the Graduates' Satisfaction

This section dealt with the graduates' perception of some of aspects of the doctoral programs, and their satisfaction with these aspects. The results of the chi-square test of significance on Hypothesis Two are presented below.

Hypothesis Two

There is no significant difference in the levels of satisfaction experienced by international and American graduates in terms of the actual programs offered.

There were 20 questions with 77 items that pertained to this hypothesis. They were questions 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 24, 25, 26, 27, 39, 40, 41, 42, and 43. Table 22 shows the values for chi-square (χ^2), degrees of freedom (df), and the probability. The asterisks on the right-hand column denote statistically significant items. Five items were significant. Hypothesis Two is rejected for these five items but retained for the rest of the items. These differences are further discussed below.

Question 10. Greatest obstacles. The graduates were asked about the greatest obstacles they had to overcome in the completion

TABLE 21
 AVAILABILITY OF DOCTORAL STUDIES
 IN OTHER COUNTRIES

=====		
	NUMBER	PERCENT

No	22	42.31
Uncertain	11	21.15
Yes	19	36.54

TOTAL	52	100.00

TABLE 22
THE CHI-SQUARE (χ^2) TABLE OF QUESTIONS
GROUPED UNDER HYPOTHESIS TWO

Questions	χ^2	df	P	* <.05
10. What were the greatest obstacles you had to overcome in the completion of the requirements for the doctorate?				
Academic	.579	1	.447	
Social	.472	1	.492	
Financial	5.724	1	.017	*
Cultural	1.295	1	.255	
Personal	1.696	1	.193	
Other(s)	12.908	5	.024	*
11. To what extent did you get adequate and helpful guidance in overcoming these obstacles from?				
Chairman of your dissertation committee	1.334	3	.721	
Dissertation advisor if different from chairman	.530	2	.767	
Other members of your dissertation committee	2.103	3	.551	
Dean of School of Education	3.041	3	.385	
Department Chairman	7.450	3	.059	
Other members of the faculty	1.464	3	.691	
Other doctoral students/friends	3.522	3	.318	
Other(s)	1.339	2	.512	
12. How was your dissertation topic really selected?	1.235	1	.539	
13. How closely did your dissertation advisor work with you: i.e., how much attention, direction, supervision, etc., did he/she give to the development of your dissertation?	4.868	2	.088	
14. How would you describe your feeling about the experience of writing the doctoral dissertation?	6.611	2	.085	

TABLE 22--Continued

Questions	χ^2	df	P	* <.05
15. Quality of instruction. Indicate below in percentages how you would categorize the quality of instruction in your doctoral courses in education. Total should equal 100%.				
Courses with superior instruction	.181	3	.981	
Courses with better than average instruction	2.600	3	.457	
Courses with average instruction	3.643	3	.303	
Courses with below average instruction	.000	1	1.000	
Courses with poor instruction	.001	1	.973	
16. From your knowledge of doctoral programs in education of other universities, how would you rate the doctoral programs of the School of Education at Andrews University?	2.564	3	.464	
17. How would you rate the faculty of the doctoral programs of the School of Education?				
Sensitivity to students' needs	6.625	4	.157	
Knowledge of their fields	1.137	2	.768	
Teaching ability	3.189	4	.526	
Awareness of current trends in their fields	1.099	2	.777	
Publishing activities	.580	4	.965	
Research skills	3.099	4	.543	
Other(s)	.000	1	1.000	
18. What are the greatest strengths of the doctoral programs of the School of Education at AU?	20.959	12	.051	
19. What are the greatest weaknesses of the doctoral programs of the School of Education at AU?	17.254	15	.304	
21. Please indicate your level of satisfaction with the following items in connection with your doctoral study:				
Your present economic status	5.930	4	.204	
AU's job placement services	4.843	4	.304	
The extent with which the doctoral programs met your personal educational objectives	7.686	4	.104	

TABLE 22--Continued

Questions	χ^2	df	p	* <.05
Educational facilities such as classrooms, study areas, and library	.345	3	.951	
The number of faculty and staff	2.814	3	.421	
The quality of the faculty and staff	6.916	3	.075	
Availability of financial assistance	7.557	4	.109	
The relevance of your doctoral preparation to your present career or profession	3.197	4	.525	
Faculty-student relationships	3.842	3	.279	
Student-student interaction	4.520	3	.211	
The extent with which the doctoral programs measured up to your pre-arrival expectation	3.182	3	.364	
24. Schools of education have often been criticized for having needless duplication of course content in their curricula. Did you in your own program find such duplication of content in your courses at AU?	.078	2	.962	
If the answer is yes, please rate the extent of the duplication on the scale of 1 to 10, where 1 indicates little and 10 indicates considerable.	9.465	9	.396	
25. Did you have a clear understanding of the goals and objectives of the doctoral programs?	2.233	2	.327	
26. Did you perceive any indications that the School of Education was attempting to meet the needs of its international doctoral students?	14.420	2	.000	*
27. In your opinion were the doctoral programs sufficiently geared to meet the needs of its multinational student body?	5.581	2	.061	
39. Do you feel that the expense in time, effort, and money for your doctorate was justified?	.204	2	.903	
40. Do you feel that your doctorate from an American Institution has the same prestige value as a comparable degree from European countries?	6.150	2	.046	*
41. Do you feel that your doctorate from AU has the same prestige value as a comparable degree from other American universities?	8.581	2	.014	*

TABLE 22--Continued

Questions	χ^2	df	p	* <.05
42. If you were starting your graduate work in education over again, and had your choice of any graduate school in the United States, would you again choose AU?	4.620	2	.099	
43. Would you recommend the doctoral programs of the School of Education at AU to others?	.000	1	1.000	
<p>The following items describe abilities or competencies which many students acquire in connection with their graduate program. Some are required and appear in all programs; others are optional or appear in the programs of certain graduates only, depending on the major or minor/cognate fields. Indicate the usefulness of each item to you in terms of present or most recent position.</p>				
Ability to locate, read, interpret and apply research to educational problems	.169	2	.919	
Ability to design and carry on research	1.889	2	.389	
Ability to organize and communicate ideas and information by effective writing	.444	2	.801	
Ability to exert leadership in matters of professional and community cooperation	.827	2	.661	
An understanding of your major area of specialization	2.859	2	.240	
Knowledge in your minor area of specialization in education	3.839	2	.147	
Knowledge in your minor area outside the education field	1.116	2	.572	
Ability to use and interpret statistical data and procedures	.559	2	.756	
9. Indicate the extent to which your doctoral programs at AU contributed to each of the competencies, using the following scale for rating: (0) Missing from your program, (1) Unsatisfactory, (2) Poor, (3) Fair, (4) Good, (5) Excellent.				
Ability to locate, read, interpret and apply research to educational problems	2.198	5	.821	
Ability to design and carry on research	9.421	4	.051	

TABLE 22--Continued

Questions	χ^2	df	p	* <.05
Ability to organize and communicate ideas and information by effective writing	3.894	5	.565	
Ability to exert leadership in matters of professional and community cooperation	7.891	5	.162	
An understanding of your major area of specialization	3.947	4	.413	
Knowledge in your minor area of specialization in education	3.903	4	.419	
Knowledge in your minor area outside the education field	6.428	5	.267	
Ability to use and interpret statistical data and procedures	4.841	5	.436	
10. Return once more, please, to the same list above and circle the number (#) of the competencies which you feel should be acquired during the doctoral work regardless of whether you acquired them or not in your own program.				
Ability to locate, read, interpret and apply research to educational problems	.727	1	.394	
Ability to design and carry on research	1.603	1	.206	
Ability to organize and communicate ideas and information by effective writing	3.682	1	.055	
Ability to exert leadership in matters of professional and community cooperation	.001	1	.982	
An understanding of your major area of specialization	2.017	1	.156	
Knowledge in your minor area of specialization in education	2.424	1	.120	
Knowledge in your minor area outside the education field	.000	1	1.00	
Ability to use and interpret statistical data and procedures	.000	1	.988	

of their doctorates. Six alternative responses were proposed to them. Differences in the graduates' responses were found on two alternatives responses: financial and others.

Table 23 shows the distribution of graduates who struggled financially during their doctoral studies. While only 31% of the American graduates reported having had financial difficulties, up to 57% of the international graduates struggled financially while pursuing the doctorate. Perhaps the international graduates who experienced financial difficulties were not sponsored and managed to come to AU in spite of the U.S. government's efforts to screen out financially marginal students. The data also indicated that there were sponsored students who experienced financial difficulties as well.

Table 24 shows the distribution frequency of other problems cited by the respondents. A higher proportion of the American graduates (39.13%) had problems balancing full-time employment, family obligations, and their doctoral studies. Only one international graduate reported having had the same problem. Time factor and health-related problems were cited by 42.86% of the international graduates. Twelve other cited problems were miscellaneous in nature.

Table 25 provides an overall and perhaps a better picture of the graduates' problems while pursuing the doctorate. Financial, academic, and personal problems seemed to trouble them the most. Conversely, they encountered little or no social and cultural problems. It can be surmised at this juncture that while the graduates did face a number of problems during their doctoral

TABLE 23

FINANCIAL PROBLEMS AS THE GREATEST OBSTACLES THE
GRADUATES HAD TO OVERCOME IN COMPLETING
THEIR DOCTORAL STUDIES

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
No	35	68.63	23	43.40	58	55.77
Yes	16	31.37	30	56.60	46	44.23
TOTAL	51	100.00	53	100.00	104	100.00

TABLE 24

OTHER PROBLEMS THE GRADUATES HAD TO OVERCOME IN
COMPLETING THEIR DOCTORAL STUDIES

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Full-time employment	9	39.13	0	.00	9	24.32
Balancing time between family, work, and study	4	17.39	1	7.14	5	13.51
Time factor	2	8.70	3	21.43	5	13.51
Health and age	1	4.35	2	21.43	3	8.11
English language	0	.00	2	14.29	2	5.41
Others	7	30.43	5	35.71	12	32.44
TOTAL	23	100.00	14	100.00	37	100.00

TABLE 25
THE GREATEST OBSTACLES GRADUATES
HAD TO OVERCOME

	NUMBER	PERCENT OF 104
Financial	46	44.23
Academics	36	34.62
Personal	22	21.15
Cultural	3	2.88
Social	2	1.92
Others	37	35.55

studies, no single problem was identified as debilitating to the majority of them.

Question 26. The needs of international doctoral students.

The graduates were asked if they perceived any indications that the School of Education was attempting to meet the needs of its international doctoral students. With reference to Table 26, the vast majority of the American graduates (88%) were convinced the School of Education was doing its best to meet the needs of its international students. Thirty-two (60.38%) international graduates agreed with their American counterparts' assessment. However, 23% of the international graduates were of the opinion that the needs of the international students were in fact not being met. No American graduates shared this sentiment.

Question 40. U.S. doctorates vs. European doctorates. Table

27 shows the distribution of the graduates' perception as to whether their doctorates from an American institution are comparable in prestige value to similar European degrees. Fifty-two percent of all the respondents estimated their American degree to have the same prestige value as comparable European degrees. The disparity in perception is found among those who did not esteem American doctorates as highly as as European doctorates, and also those who were uncertain of the prestige status of American doctoral degrees. There were more international graduates (20.75%) than American graduates (4.26%) who perceived their American doctorates as less prestigious than similar European degrees. Also, the proportion of American graduates (40.42%) who were uncertain of the prestige status

TABLE 26

PERCEPTIONS AS TO WHETHER THE SCHOOL OF EDUCATION
WAS ATTEMPTING TO MEET THE NEEDS OF ITS
INTERNATIONAL DOCTORAL STUDENTS

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
No	0	0.0	12	22.64	12	11.65
Uncertain	6	12.00	9	16.98	14	14.56
Yes	44	88.00	32	60.38	75	73.79
TOTAL	50	100.00	53	100.00	103	100.00

TABLE 27

PERCEPTION AS TO WHETHER DOCTORATES FROM AMERICAN
INSTITUTIONS HAVE THE SAME PRESTIGE VALUE AS
COMPARABLE EUROPEAN DEGREES

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
No	2	4.26	11	20.75	13	13.00
Uncertain	19	40.42	16	30.19	35	35.00
Yes	26	55.32	26	49.06	52	52.00
TOTAL	47	100.00	53	100.00	100	100.00

of their American doctorates was higher than that of the international graduates (30.19%).

Question 41. AU doctorates vs. other U.S. doctorates. The graduates were also asked if they thought their doctorates from AU have the same prestige value as comparable degrees from other American universities. Table 28 shows the frequency distribution of their perception. Half the respondents (49.51%) perceived their AU degrees to be as prestigious as those from other American universities. Among the international graduates, more of them (54.71%) perceived their degrees to be as prestigious as other comparable American degrees. However, 19% thought otherwise, and the other 26% were uncertain. The American graduates were somewhat evenly divided on this issue. Forty-four percent believed their degrees from AU were as prestigious as any other American degrees. Another 44% thought otherwise, and 12% were uncertain.

Consensus of opinion

Further investigation of the contingency tables of the other questions in this section revealed consensus of opinion among the graduates on questions 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 39, 42, 43, and on the questionnaire section dealing with competencies. These are presented in more detail below.

Question 11. Source of help in overcoming obstacles. The graduates were able to get some form of help in their effort to overcome the problems and obstacles they faced. Their sources of help are presented on Table 29. They are tabulated in descending order of their frequency on the rating scale of "some" and "considerable." According to the graduates, their best source of

TABLE 28
 PERCEPTION AS TO WHETHER DOCTORATES FROM ANDREWS
 UNIVERSITY HAVE THE SAME PRESTIGE VALUE AS
 COMPARABLE DEGREES FROM OTHER
 AMERICAN UNIVERSITIES.

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
No	22	44.00	10	18.87	32	31.07
Uncertain	6	12.00	14	26.42	20	19.42
Yes	22	44.00	29	54.71	51	49.51
TOTAL	50	100.00	53	100.00	103	100.00

TABLE 29
THE EXTENT TO WHICH THE GRADUATES WERE ABLE
TO GET HELP FROM CERTAIN SOURCES

	NONE		LITTLE		SOME		CONSIDERABLE		TOTAL	
	#	%	#	%	#	%	#	%	#	%
Chairman of dissertation committee	11	11.83	5	5.38	24	25.80	53	56.99	93	100.00
Other members of dissertation committee	15	19.23	15	19.23	22	28.21	26	33.33	78	100.00
Department chairman	19	23.75	13	16.25	27	33.75	21	26.25	80	100.00
Dean of School of Education	21	26.25	18	22.50	27	33.75	14	17.50	80	100.00
Other members of the faculty	19	23.75	23	28.75	26	32.50	12	15.00	80	100.00
Other doctoral students/friends	23	30.66	20	26.67	17	22.67	15	20.00	75	100.00
Dissertation advisor if different from chairman	10	31.26	0	.00	11	34.37	11	34.37	32	100.00
Other(s)	4	26.67	1	6.67	0	.00	10	66.66	15	100.00

help were: the dissertation chairman (77), other members of their dissertation committees (48), and the department chairman (48). They indicated getting very little support from fellow doctoral students.

Question 12. Selection of Dissertation topic. The selection process of the graduates' dissertation topics is shown on Table 30. It indicates a high level of independence or flexibility afforded to the graduates in the topic-selection process. Seventy (67.31%) graduates reported having selected the topics themselves. Thirty-three (31.73%) said the selection was done jointly with their advisors. Only one (0.96%) graduate reported writing on a topic selected by his/her advisor.

Question 13. Advisor's participation in the dissertation development. Table 31 shows how closely the dissertation advisors worked with the doctoral candidates in the development of their dissertation. Forty-three (41.34%) graduates indicated they had close and continuous supervision from their advisors, and another 50 (48.08%) reported getting less but sufficient help. Only 11 (10.58%) graduates reported being left on their own with very little help from their advisors. It can be concluded that the dissertation advisors were sufficiently helpful to the majority of the graduates.

Question 14. The dissertation experience. It appears that the majority of the graduates felt there was at least some element of intellectual enlightenment in their dissertation-writing experience. The graduates' descriptions of their experience are shown on Table 32. Sixty-seven (64.42%) indicated the process was intellectually enlightening. One (0.96%) graduate thought it was a worthless

TABLE 30
THE DISSERTATION TOPIC SELECTION PROCESS

SELECTION PROCESS	NUMBER	PERCENT
Dissertation advisor selected it	1	.96
I selected it	70	67.31
The selection was done jointly	33	31.73
TOTAL	104	100.00

TABLE 31
INDICATION OF HOW CLOSELY THE DISSERTATION ADVISOR
WORKED WITH THE GRADUATE IN THE DEVELOPMENT
OF THE DISSERTATION

RESPONSES	NUMBER	PERCENT
Close and continuous supervision	43	41.34
Less, but sufficient help	50	48.08
Very little help. I was left to work mostly on my own	11	10.58
TOTAL	104	100.00

TABLE 32
THE GRADUATES' DESCRIPTION OF THEIR EXPERIENCE
OF WRITING THE DISSERTATION

DESCRIPTION	Number	Percent
An enlightening intellectual experience	67	64.42
A tedious drudgery; not worth the effort but necessary for the degree	1	.96
In between -- elements of both the above	32	30.77
Other	4	3.85
TOTAL	104	100.00

drudgery, and thirty-two (30.77%) felt it was a combination of both drudgery and intellectual enlightenment.

Question 15. Quality of instruction. The graduates were requested to categorize in percentages the quality of instruction in their doctoral courses. Table 33 shows the distribution of their responses. In general, the graduates were appreciative of the quality of instructions in their courses. Thirty-four percent of the instructions were rated superior, 27% were thought of as above average, and another 27% were rated average. Only 11% of the instructions were rated either below average or poor.

Question 16. Rating the doctoral programs. The graduates also gave the doctoral programs of the School of Education a high rating in comparison to similar programs offered by other universities. The ratings are shown on Table 34. Fourteen (14.29%) graduates rated the programs as among the best, and 62 (62.26%) rated them above average. Another 20 (20.41%) rated them average. Only two (2.04%) graduates rated the programs below average.

Question 17. Rating the faculty. The graduates were asked to rate their faculty on six given categories: sensitivity to students needs, knowledge of their fields, teaching ability, awareness of current trends in their fields, publishing activities, and research skills. They were to be rated on the scale of: poor, fair, average, good, and excellent. The results of their ratings are shown on Table 35. On sensitivity to students' needs, the faculty were rated "good" or "excellent" by the majority of the graduates (79%). (Percentages are combined and shown in parenthesis). The faculty were also similarly rated on knowledge of their fields by 89

TABLE 33

THE GRADUATES' ASSESSMENT OF THE QUALITY OF
INSTRUCTION IN THEIR DOCTORAL COURSES

ASSESSMENT	Percent
Courses with superior instruction	34.44
Courses with better than average instruction	27.15
Courses with average instruction	27.15
Courses with below average instruction	7.18
Courses with poor instruction	4.38
TOTAL	100.00

TABLE 34

THE GRADUATES' RATINGS OF THE DOCTORAL
PROGRAMS IN COMPARISON TO THOSE
OFFERED BY OTHER UNIVERSITIES

RESPONSES	NUMBER	PERCENT
One of the best	14	14.29
Above average	62	63.26
Average	20	20.41
Below average	2	2.04
Poor	0	0.00
TOTAL	98	100.00

TABLE 35
THE GRADUATES' RATINGS OF THE FACULTY OF THE DOCTORAL PROGRAMS

	POOR		FAIR		AVERAGE		GOOD		EXCELLENT		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%
Sensitivity to students' needs	1	1.00	2	2.00	18	18.00	56	56.00	23	23.00	100	100.00
Knowledge of their fields	0	.00	1	.99	11	10.89	67	66.34	22	21.78	101	100.00
Teaching ability	1	.99	1	.99	31	30.69	58	57.43	10	9.90	101	100.00
Awareness of current trends in their fields	1	.99	0	.00	25	24.75	61	60.40	14	13.86	101	100.00
Publishing activities	5	5.10	19	19.39	35	35.71	37	37.76	2	2.04	98	100.00
Research skills	1	1.00	10	10.00	35	35.00	40	40.00	14	14.00	100	100.00

(88.12%) graduates. The majority of the graduates went on to rate the faculty "average" or "good" on these categories: teaching ability (88.12%), awareness of current trends in their fields (85.15%), publishing activities (73.47%), and research skills (75%).

According to the graduates, the faculty are noted for their sensitivity to students' needs and knowledge of their fields. Publishing activities and research skills had higher incidence of being rated either "fair" or "poor" than the rest of the categories.

Question 18. Strengths of the doctoral programs. This was an open-ended question in which the graduates were expected to indicate what they perceived to be the strengths of the doctoral programs. Their responses are tabulated and shown on Table 36. The most frequently cited strengths of the doctoral programs were (in order of frequencies): Christian education and atmosphere (28), faculty (25), personal attention (16), statistics and research training (13), library facilities (10), small size (7), and integration of faith and learning (7). The faculty were most often cited for these attributes: Christians, caring, supportive, and interest in students.

Question 19. Weaknesses of the doctoral programs. The graduates were also requested to indicate their perception of the programs' weaknesses. Table 37 shows the graduates' responses. The most cited weaknesses were (in order of frequencies): constantly shifting policies and requirements (10), overloaded professors (7), lack of research by faculty (7), and lack of flexibility due to limited course offerings (7).

TABLE 36
GREATEST STRENGTHS OF THE DOCTORAL PROGRAMS

	Number	Percent
Christian education and atmosphere	28	19.31
Faculty (christian, caring, supportive and interested in students)	25	17.24
Personal attention	16	11.03
Statistics and research training	13	8.96
Library facilities	10	6.90
Small size	7	4.83
Integration of faith and learning	7	4.83
International mix of the students	6	4.14
Good faculty - student interactions	6	4.14
Offer broad-based education	2	1.38
Flexibility	2	1.38
Others	23	15.86
TOTAL	145	100.00

TABLE 37
GREATEST WEAKNESSES OF THE DOCTORAL PROGRAMS

	Number	Percent
Constantly shifting policies and requirements	10	8.54
Overloaded professors	7	6.00
Lack of research	7	6.00
Lack of flexibility due to limited class offerings	7	6.00
Lack of reputation and prestige	4	3.42
Faculty in-fighting (politics)	4	3.42
Too much on theory, thin on practical	4	3.42
Lack world-wide scope	4	3.42
Small number of professors	3	2.56
Lack of student interactions	3	2.56
Not up-to-date (current)	3	2.56
Lack of substance in doctoral classes	3	2.56
Lack of field work	2	1.70
Lack depth	2	1.70
Teacher oriented	2	1.70
Others	52	44.44
TOTAL	117	100.00

Question 21. Graduates' satisfaction. Attempts were made to ascertain the graduates' level of satisfaction on a list of items in connection with their doctoral studies. The listed items ranged from their present economic status to the relevance of their doctoral preparation.

The following observations were derived from the graduates' tabulated (Table 38) responses. The majority of the graduates were "satisfied" or "very satisfied" on these items (combined percentages are in brackets): educational facilities such as classrooms, study areas, and library (93.14%); faculty-student relationships (87.78%); the extent to which the doctoral programs met students' needs (85.44%); the extent to which the doctoral programs measured up to pre-arrival expectations (80.59%); quality of faculty and staff (78.64%); the relevance of doctoral preparation to present career or profession (77.45%); student-student relationships (77.23%); and the number of faculty and staff (68.93%).

"Neutral" or "satisfied" ratings were given to: present economic status (71%) and availability of financial aids (67.82%). "Dissatisfied" and "very dissatisfied" ratings were found on AU's job placement services (18), the number of faculty and staff (18), and the availability of financial assistance (16).

Question 25. The goals and objectives of the programs. The graduates were asked if they had a clear understanding of the goals and objectives of the doctoral programs. Their responses are shown on Table 39. It is apparent that the majority (81.37%) of the graduates understood what the School of Education was trying to achieve through its doctoral programs. Fourteen other graduates

TABLE 38
THE GRADUATES' LEVEL OF SATISFACTION WITH CERTAIN
ITEMS IN CONNECTION WITH THEIR DOCTORAL STUDIES

	VERY DISSATISFIED		DISSATISFIED		NEUTRAL		SATISFIED		VERY SATISFIED		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%
Educational facilities such as classrooms, study areas, and library	0	.00	2	1.96	5	4.90	49	48.04	46	45.10	102	100.00
Faculty-student relationships	1	.97	0	.00	12	11.65	43	41.75	47	45.63	103	100.00
The extent with which the doctoral programs met your personal educational objectives	1	.97	6	5.83	8	7.77	54	52.43	34	33.01	103	100.00
The extent with which the doctoral programs measured up to your pre-arrival expectation	0	.00	3	2.91	17	16.50	54	52.43	29	28.16	103	100.00
The quality of the faculty and staff	0	.00	5	4.85	17	16.50	64	62.14	17	16.50	103	100.00
The relevance of your doctoral preparation to your present career or profession	2	1.96	7	6.86	14	13.73	45	44.12	34	33.33	102	100.00
Student-student interaction	0	.00	4	3.96	19	18.81	53	52.48	25	24.75	101	100.00
The number of faculty and staff	0	.00	18	17.48	14	13.59	46	44.66	25	24.27	103	100.00
Your present economic status	3	3.00	8	8.00	24	24.00	47	47.00	18	18.00	100	100.00
Availability of financial assistance	7	8.05	9	10.34	36	41.38	23	26.44	12	13.79	87	100.00
AU's job placement service	9	11.54	9	11.54	52	66.67	7	8.97	1	1.28	78	100.00

TABLE 39
THE GRADUATES' RESPONSES AS TO WHETHER THEY HAD
A CLEAR UNDERSTANDING OF THE GOALS AND
OBJECTIVES OF THE DOCTORAL PROGRAMS

RESPONSES	NUMBER	PERCENT
No	5	4.90
Uncertain	14	13.73
Yes	83	81.37
TOTAL	102	100.00

(13.73%) were uncertain. Only five (4.9%) graduates indicated having no clear understanding of the goals and objectives of their programs.

Question 39. Was doctorate worth the time, effort, and money? Table 40 indicates the graduates sentiments on this issue. The vast majority (76.7%) of the graduates thought the expense in time, effort, and money for the doctorate was justified. Nine (8.74%) were uncertain, and 15 (14.56%) other graduates did not see any justification for such expenditures.

Question 42. Would graduates attend AU again? The graduates were given the scenario of having to re-do their doctorate, and asked if they would again attend AU. Their responses are shown on Table 41. Only about half (53.85%) the graduates would choose to attend AU again, 37% were uncertain, and 19% would prefer to study somewhere else.

Question 43. Recommending the programs to others. The overwhelming majority (94.06%) of the graduates indicated their willingness to recommend the doctoral programs of the School of Education to others (Table 42). However, an investigation of their comments revealed that their recommendations were contingent on the compatibility of students' goals with the kinds of programs offered.

Competencies. The following pertain to competencies associated with doctoral studies. The graduates were asked to indicate the utilizations of acquired competencies, AU's contributions to these competencies, and the kind of competencies they expected to acquire from their doctoral studies.

Table 43 shows the utilizations of acquired competencies by the graduates in their present positions. They are tabulated in

TABLE 40
 RESPONSES INDICATING IF THE EXPENSE IN
 TIME, EFFORT, AND MONEY FOR THE
 DOCTORATE WAS JUSTIFIED

RESPONSE	NUMBER	PERCENT
No	15	14.56
Uncertain	9	8.74
Yes	79	76.70
TOTAL	103	100.00

TABLE 41

RESPONSES INDICATING IF THE GRADUATES
WOULD AGAIN CHOOSE TO STUDY
AT ANDREWS UNIVERSITY

RESPONSE	NUMBER	PERCENT
No	20	19.23
Uncertain	28	26.92
Yes	56	53.85
TOTAL	104	100.00

TABLE 42

RESPONSES INDICATING IF THE GRADUATES WOULD
RECOMMEND THE PROGRAMS TO OTHERS

RESPONSE	NUMBER	PERCENT
No	6	5.94
Yes	95	94.06
TOTAL	101	100.00

TABLE 43
COMPETENCY USEFULNESS IN PRESENT POSITION

	SELDOM USED		OFTEN USED		CONSTANTLY USED		TOTAL FREQUENCY	
	#	%	#	%	#	%	#	%
An understanding of your major area of specialization	3	3.06	33	33.67	62	63.27	98	100.00
Ability to organize and communicate ideas and information by effective writing	8	8.25	36	37.11	53	54.64	97	100.00
Ability to exert leadership in matters of professional and community cooperation	12	12.24	38	38.78	48	48.98	98	100.00
Knowledge in your minor area of specialization in education	24	25.00	49	51.04	23	23.96	96	100.00
Ability to locate, read, interpret and apply research to educational problems	34	35.05	44	45.36	19	19.59	97	100.00
Knowledge in your minor area outside the education field	29	32.58	41	46.07	19	21.35	89	100.00
Ability to use and interpret statistical data and procedures	50	51.02	35	35.71	13	13.27	98	100.00
Ability to design and carry on research	55	56.70	32	32.99	10	10.31	97	100.00

descending order of the combined frequencies of "often used" and "constantly used" ratings. The three most commonly used competencies by the graduates are: An understanding of major area of specialization (95), ability to organize and communicate ideas and information by effective writing (89), and the ability to exert leadership in matters of professional and community cooperation (86). The competencies "seldom used" are: Ability to design and carry on research; ability to use and interpret statistical data and procedures; and the ability to locate, read, interpret, and apply research to educational problems.

Table 44 shows the graduates' perception of the ability of the programs to impart the listed competencies to them. They have also been tabulated in descending order of the combined frequencies of "good" and "excellent" ratings. The graduates seemed most impressed by the programs' contributions to them on the following: the ability to locate, read, interpret, and apply research to educational problems (77); understanding of their major field of specialization (72); and ability to design and carry on research (71). They appeared least impressed with the programs' contributions to: ability to exert leadership in matters of professional and community cooperation, and knowledge outside the education field.

Table 45 shows the competencies which the graduates felt should be acquired during the course of a doctoral study. The frequency counts on the right-hand column denote the number of times each item had been check-marked by the graduates. Each item has a potential frequency count of 104. The competencies chosen most often by the graduates were (in order of frequencies): the ability to

TABLE 44
THE EXTENT TO WHICH THE DOCTORAL PROGRAMS CONTRIBUTED
TO CERTAIN COMPETENCIES

	MISSING IN PROGRAMS		UNSATIS- FACTORY		POOR		FAIR		GOOD		EXCELLENT		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Ability to locate, read, interpret and apply research to educational problems	11	10.58	1	.96	4	3.85	11	10.58	49	47.12	28	26.92	104	100.00
An understanding of your major area of specialization	9	8.65	0	.00	2	1.92	21	20.19	46	44.23	26	25.00	104	100.00
Ability to design and carry on research	10	9.62	0	.00	2	1.92	21	20.19	47	45.19	24	23.08	104	100.00
Ability to organize and communicate ideas and information by effective writing	11	10.58	2	1.92	3	2.88	21	20.19	38	36.54	29	27.88	104	100.00
Knowledge in your minor area of specialization in education	15	14.42	0	.00	6	5.77	20	19.23	44	42.31	19	18.27	104	100.00
Ability to use and interpret statistical data and procedures	11	10.58	1	.96	6	5.77	24	23.08	41	39.42	21	20.19	104	100.00
Knowledge in your minor area outside the education field	23	22.12	1	1.96	3	2.88	23	22.12	33	31.73	21	20.19	104	100.00
Ability to exert leadership in matters of professional and community cooperation	11	10.68	3	2.91	8	7.77	31	30.10	32	31.07	18	17.48	103	100.00

TABLE 45
COMPETENCIES THAT SHOULD BE ACQUIRED DURING
THE DOCTORAL STUDIES

COMPETENCIES	NUMBER	PERCENT OF 104
Ability to organize and communicate ideas and information by effective writing	68	65.38
Ability to design and carry on research	65	62.50
Ability to locate, read, interpret and apply research to educational problems	64	61.54
An understanding of your major area of specialization	60	57.69
Ability to exert leadership in matters of professional and community cooperation	58	55.77
Ability to use and interpret statistical data and procedures	56	53.85
Knowledge in your minor area of specialization in education	45	43.27
Knowledge in your minor area outside the education field	32	30.77

organize and communicate ideas and information by effective writing (68); ability to design and carry on research (65); and the ability to locate, read, interpret, and apply research to educational problems (64). The competencies chosen by less than half the graduates were: knowledge in minor area outside of the educational field (32) and knowledge in minor area of specialization (45).

In short, the competencies most valuable to the graduates in their daily professional lives appear to be related to communication skills and leadership abilities. The doctoral programs, on the other hand, were perceived to have contributed more to research-related competencies. In reality, the graduates seemed to expect communication skills and research-related competencies from their programs.

Post-Doctoral Professional Growth

This section dealt with the graduates' post-doctoral professional development. Attempts were made to determine if their doctorates made any difference in their professional lives. The results of the chi-square test of significance on Hypothesis Three are presented below.

Hypothesis Three

There is no significant difference in the professional growth experienced by international and American graduates after their doctoral studies.

Twelve questions with 26 items were set to address this hypothesis. They were questions 1, 2, 28, 29, 30, 31, 32, 35, 36, 37, 38, and 46. Table 46 shows the values for chi-square (χ^2), degrees of freedom (df), and the probability. Five items were found

TABLE 46

THE CHI-SQUARE (χ^2) TABLE OF QUESTIONS
GROUPED UNDER HYPOTHESIS THREE

Questions	χ^2	df	P	* <.05
1. Present employment status	2.306	4	.679	
2. Present position or rank	33.099	25	.129	
Name of Employer(s)	12.012	5	.035	*
Length of time in present position	7.075	7	.421	
28. Check the method or methods by which you obtained your first position after receiving the doctorate.	12.417	4	.015	*
29. Position satisfaction. How well pleased are you with your present position professionally?	1.814	3	.612	
30. Professional growth. In your opinion, has there been a change in your status because of the doctorate?				
Promotion in rank?	.050	2	1.000	
Increase in salary?	2.284	2	.319	
Acceptance by colleagues?	1.855	2	.396	
Acceptance socially?	6.799	2	.033	*
31. Advancement. Check the extent to which you believe you have advanced in rank within the possibilities of your present post.	2.037	4	.729	
32. Division of time. Estimate the percent of time you spent in each of the following categories as part of a typical work week during the past year.				
Administrative	5.578	9	.781	
Teaching and preparation	12.782	9	.173	
Research, writing and creative work	2.308	4	.679	
Individual case work, counselling with students, etc.	7.361	8	.498	
Other(s) not mentioned above	4.140	5	.530	

TABLE 46--Continued

Questions	χ^2	df	P	* <.05
35. Please indicate the extent to which you have engaged in the following activities:				
Number of books or monographs published	5.094	4	.277	
Number of articles published in Adventist journals, newsletters, etc.	6.264	7	.509	
Number of articles published in other journals, newsletters, etc.	9.601	5	.087	
If you are in college or university teaching, indicate the number of committees on which you are now serving	8.039	5	.154	
Number of state or national committees on which you are now serving	4.249	6	.643	
Number of professional organizations in which you hold membership	19.551	6	.003	*
36. How much public speaking do you do in your professional field?	4.235	3	.237	
37. Financial status. Earned income. Please indicate your earned income during the past one year. Include salary, consultant fees, royalties and other income from your professional activities, but not from investments and other sources. If you have not yet been employed for a full year, estimate the yearly income. (In US Currency)	37.608	11	.000	*
38. Salary. In your opinion, how much greater is your yearly income as a result of having earned a doctorate?	6.133	3	.105	
46. What honors, awards, grants, or fellowships have come to you since the doctorate? Please explain number, value, and details.	3.370	1	.066	

to be statistically significant. Hypothesis Three is rejected for these five items but is retained for the rest of the items. Further analyses of these questions are presented below.

Question 2. Employers. Table 47 shows the employing organizations that the graduates are presently working for. A higher proportion of the international graduates (79.25%) are presently working for the Seventh-day Adventist Church. In comparison, only about half (50.98%) of the American graduates are working for the Adventist Church. Nineteen (37.26%) other American graduates are working outside of the Adventist denomination, four (7.84%) are self-employed, one (1.96%) is unemployed, and another (1.96%) has no reported employment status. As for the rest of the international graduates, eight (15.09%) work outside the Adventist denomination, and one (1.89%) graduate fits each of these categories: self-employed, unemployed, and retired.

Eighty-one of the graduates (77.89%) have been in their present position for at least two years (see Table 48). There were 68 graduates (65.39%) who have been with their current position for at least three years, and 31 graduates indicated having been in the same position for more than five years.

Question 28. First post-doctoral position. The difference in the graduates' method(s) of securing their first position after receiving the doctorate are indicated on Table 49. The American graduates tended to return to the positions they held before or during their graduate work (68.63%). In contrast, only 45% of the international graduates returned to their former positions. There were also more international graduates (33.96%) than American

TABLE 47

THE GRADUATES' EMPLOYERS

EMPLOYERS	AMERICANS		INTER-NATIONALS		TOTAL	
	#	%	#	%	#	%
SDA organizations	26	50.98	42	79.24	68	65.39
Non-SDA organizations	19	37.26	8	15.09	27	25.96
Self-employed	4	7.84	1	1.89	5	4.81
Unemployed	1	1.96	1	1.89	2	1.92
Retired	0	.00	1	1.89	1	.96
Unknown	1	1.96	0	.00	1	.96
TOTAL	51	100.00	53	100.00	104	100.00

TABLE 48

LENGTH OF TIME IN PRESENT POSITION

	NUMBER	PERCENT
Unknown	7	6.73
Six months or less	9	8.65
One year	7	6.73
Two years	13	12.50
Three years	20	19.23
Four years	11	10.58
Five years	6	5.77
More than five years	31	29.81
TOTAL	104	100.00

TABLE 49
THE GRADUATES' METHODS OF OBTAINING THEIR FIRST
POSITION AFTER RECEIVING THE DOCTORATE

METHODS	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Held position before or during the graduate work	35	68.63	24	45.29	59	56.73
Contact through major advisor or department head	0	0.00	2	3.77	2	1.92
Through the university placement service	1	1.96	0	0.00	1	.96
On own initiative	10	19.61	9	16.98	19	18.27
Other(s)	5	9.80	18	33.96	23	22.12
TOTAL	51	100.00	53	100.00	104	100.00

graduates (9.8%) who obtained their first job after the doctorate by various other means.

Question 30. Professional growth. Differences also existed in the graduates' perceptions of their status as a result of their doctorate. Table 50 shows a higher proportion of international graduates (77.55%) who experienced greater acceptance socially because of their doctorate. Only 53.19% of the American graduates reported experiencing similar gains.

Question 35. Professional activities. A list of professional activities was provided to the graduates. They were requested to indicate the extent of their involvements in all applicable activities. Chi-square analyses of the graduates' responses revealed a significant difference on the item regarding professional membership.

Table 51 shows the professional memberships of the graduates. The American graduates tended to belong to more than one professional organization. In contrast, the majority of the international graduates (60.38%) belonged to only one such organization.

Table 52 indicates how active the graduates were in the rest of the listed professional activities. It shows the number of graduates who were active in the listed activities. Overall, less than half of the graduates have participated in these activities. There were 48 graduates who indicated having published articles in Seventh-day Adventist publications, and another 31 had published in other non-Adventist publications. Thirty-two graduates have published monographs or books. There were 43 who indicated

TABLE 50
SOCIAL ACCEPTANCE AS A RESULT OF THE DOCTORATE

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
No	13	27.66	5	10.20	18	18.75
Uncertain	9	19.15	6	12.25	15	15.62
Yes	25	53.19	38	77.55	63	65.63
TOTAL	47	100.00	49	100.00	96	100.00

TABLE 51
THE NUMBER OF PROFESSIONAL ORGANIZATIONS
IN WHICH GRADUATES HOLD MEMBERSHIP

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
One	15	29.41	32	60.38	45	45.19
Two	11	21.57	13	24.53	24	23.08
Three	9	17.65	6	11.32	15	14.42
Four	4	7.84	2	3.77	6	5.77
Five	7	13.73	0	0.00	7	6.73
Six	4	7.84	0	0.00	4	3.85
Eight	1	1.96	0	0.00	1	.96
Nine	0	0.00	0	0.00	0	0.00
Ten	0	0.00	0	0.00	0	0.00
TOTAL	51	100.00	53	100.00	104	100.00

TABLE 52
INVOLVEMENT IN PROFESSIONAL ACTIVITIES

	# OF GRADUATES	% OF 104
Published monographs or books	32	30.77
Published articles in Adventist publications	48	46.15
Published articles in other publications	31	29.81
Serving in college or university committees	43	41.35
Serving in state or national committees	29	27.88

membership in state and national committees, and 29 were serving in college or university committees.

Question 37. Earned income. This question was an attempt to ascertain the earning power of the graduates' doctorate. Table 53 shows the distribution of earned income per year among the doctoral graduates. The majority of the American graduates (75.01%) earned US\$24,000 or more per year. Only 27% of the international graduates were in the same income bracket. More than half of the international graduates (57.7%) earned US\$15,000 or less per year. Thirty-seven percent of the international graduates earned less than US\$10,000 per year, as compared to only 2% among the American graduates.

Consensus of Opinion

The graduates had major agreements or consensus of opinions on items in questions 1, 29, 36, and 38.

Question 1. Present employment status. The overwhelming majority of the graduates (93.27%) are employed full-time (Table 54). Three (2.89%) others are employed part-time, and one is unemployed temporarily. Two graduates have retired and one did not indicate his/her present employment status.

Question 29. Position satisfaction. This question attempted to determine if the graduates are satisfied with their present position. The graduates' responses indicated they are generally satisfied with their present job. The tabulation of their responses is presented on Table 55. Forty-four (43.56%) graduates are thoroughly satisfied with what they are presently doing and do not desire any changes. Another 47 (46.54%) are satisfied, but would

TABLE 53
EARNED INCOME FOR THE PAST
ONE YEAR (IN US CURRENCY)

INCOME	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Less than 10,000	1	2.08	19	36.55	20	20.00
10,000 - 11,999	1	2.08	5	9.62	6	6.00
12,000 - 13,999	1	2.08	3	5.76	4	4.00
14,000 - 15,999	3	6.25	3	5.76	6	6.00
16,000 - 17,999	0	0.00	2	3.85	2	2.00
18,000 - 19,999	0	0.00	3	5.76	3	3.00
20,000 - 21,999	3	6.25	2	3.85	5	5.00
22,000 - 23,999	3	6.25	1	1.92	4	4.00
24,000 - 25,999	10	20.84	3	5.76	13	13.00
26,000 - 27,999	6	12.50	2	3.85	8	8.00
28,000 - 29,999	1	2.08	2	3.85	3	3.00
30,000 and above	19	39.59	7	13.47	26	26.00
TOTAL	48	100.00	52	100.00	100	100.00

TABLE 54

PRESENT EMPLOYMENT STATUS
OF THE GRADUATES

STATUS	NUMBER	PERCENT
Full-time	97	93.27
Part-time	3	2.89
Unemployed temporarily	1	.96
Retired	2	1.92
Other	1	.96
TOTAL	104	100.00

TABLE 55

POSITION SATISFACTION OF THE GRADUATES

SATISFACTION	Number	Percent
Thoroughly satisfied, no desire to change	44	43.56
Satisfied but would consider a change	47	46.54
Somewhat satisfied, would change if I could	7	6.93
Thoroughly dissatisfied, actively seeking to change	3	2.97
TOTAL	101	100.00

consider a change. The other 10 (9.9%) respondents indicated their dissatisfaction and expressed their desire for a change.

Question 36. Public speaking. Another indicator of the graduates' post-doctoral professional activities is their speaking engagements in their field of expertise. This question required the graduates to indicate their involvement on the scale of: none, little, some, or much. Their responses are shown on Table 56. The majority of the graduates (83.65%) indicated being involved in "some" to "much" public speaking in their fields. Ten (9.62%) did "little" public speaking, and seven (6.73%) reported "none."

Question 38. Salary increase. The graduates were also asked if they experienced any salary increase as a result of their doctorate. It appears that the majority of the graduates did not experience any dramatic increase in their earned income as a result of their doctorate. Table 57 indicates their estimates of their salary increase. Forty-eight (46.6%) graduates had no salary increase, and another 27 (26.21%) estimated their salary increase as "little." Eighteen (17.48%) graduates reported having received "somewhat" of a salary increase. Only 10 (9.71%) graduates reported considerable increase in their salary.

Appropriateness of Academic Preparation to Professional Careers

This section was concerned with the appropriateness or relevance of the graduates' doctoral preparation to their professional careers. Hypothesis Four, which deals with this issue of relevance, is tested for significance using chi-square statistical analysis.

TABLE 56

INDICATION OF HOW MUCH PUBLIC SPEAKING
THE GRADUATES ARE INVOLVED IN
THEIR PROFESSIONAL FIELD

EXTENT	NUMBER	PERCENT
None	7	6.73
Little	10	9.62
Some	54	51.92
Much	33	31.73
TOTAL	104	100.00

TABLE 57

YEARLY INCOME INCREASE AS A RESULT
OF THE DOCTORATE

RESPONSE	NUMBER	PERCENT
None	48	46.60
Little	27	26.21
Somewhat	18	17.48
Considerably	10	9.71
TOTAL	103	100.00

Hypothesis Four

There is no significant difference in the perceived appropriateness of the international and American graduates' academic preparation for their post-doctoral professional careers.

Six questions with 27 items were set to test this hypothesis. They were questions 20, 22, 23, 33, 34, and 45. Table 58 shows the values for chi-square (χ^2), degrees of freedom (df), and the probability. Two items were significant on question 20. Hypothesis Four is rejected for these two items but retained for the rest of the items. Analyses of these differences are presented below.

Question 20. This question requested the graduates to estimate as to what extent their education at AU had contributed to the following: a broader concept of educational problems; intellectual growth and stimulus; cultural and aesthetic experience; poise, self-confidence, and balance; and more satisfying social relations. Differences were found in the international and American graduates' responses to the items: intellectual growth and stimulus, and cultural and aesthetic experience.

Table 59 shows the frequency distribution of the graduates' responses regarding the contribution of their studies at Andrews University to their concept of educational problems. Overall, the graduates seemed satisfied with the contribution their education at AU had made to their awareness of educational problems. However, the international graduates seemed more satisfied. Specifically, a larger proportion of the international graduates (67.92%) perceived their education at AU as having contributed "much" to their concept of educational problems. Only 39% of the American graduates perceived a similar contribution. Over half (51.02%) the American

TABLE 58
THE CHI-SQUARE (χ^2) TABLE OF QUESTIONS
GROUPED UNDER HYPOTHESIS FOUR

Questions	χ^2	df	P	* <.05
20. To what extent has your graduate education at AU contributed to the following?				
A broader concept of educational problems	8.897	2	.011	*
Intellectual growth and stimulus	.008	2	.996	
Cultural and aesthetic experience	3.439	3	.038	*
Poise, self-confidence and balance	4.845	3	.184	
More satisfying social relations	5.961	3	.114	
22. From the following list, please select the three aspects of your doctoral programs which contributed the most to your professional development. Rank the most valuable aspect 1, the second most valuable 2, and the third most valuable 3.				
Course work	2.626	2	.269	
Independent readings	.906	2	.636	
Dissertation work	1.778	2	.411	
Graduate assistantship	.640	2	.726	
Research assistantship	2.593	2	.274	
Preparation for examinations	1.552	2	.460	
Relation to your major professor or director of dissertation	1.885	2	.390	
Relation to other students	4.518	2	.105	
Other(s)	.833	2	.659	

TABLE 58--Continued

Questions	χ^2	df	P	* <.05
23. From the following list, please select the three aspects of your doctoral program which contributed the least to your professional development. Rank the least valuable aspect 1, the second least valuable 2, and the third least valuable 3.				
Course work	.331	1	.565	
Independent readings	1.515	2	.469	
Dissertation work	1.283	2	.526	
Graduate assistantship	4.467	2	.107	
Research assistantship	.405	2	.817	
Preparation for examinations	2.624	2	.269	
Relation to your major professor or director of dissertation	2.500	2	.287	
Relation to other students	3.488	2	.175	
Other(s)	.000	1	1.000	
33. Choice of major field. Is your present position one for which particular preparation was made in your				
Major field?	.143	1	.705	
Minor/cognate field(s)?	.146	1	.703	
34. In light of your work since the doctorate, do you wish that you had chosen a different major field for your graduate study?	.008	1	.928	
45. Do you have professional duties and responsibilities for which you feel your graduate preparation at AU was inadequate and for which you feel preparation should have been adequate?	.760	1	.383	

TABLE 59
 THE EXTENT TO WHICH THE GRADUATES' EDUCATION
 AT AU HAD CONTRIBUTED TO A BROADER CONCEPT
 OF EDUCATIONAL PROBLEMS

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Nothing	0	0.00	0	0.00	0	0.00
Little	5	10.20	2	3.77	7	6.86
Some	25	51.02	15	28.30	40	39.22
Much	19	38.78	36	67.93	55	53.92
TOTAL	49	100.00	53	100.00	102	100.00

graduates believed their graduate education at AU had contributed "some" to their concept of educational problems. This perception was shared by 28% of the international graduates.

The graduates' responses to the question regarding the contribution of their education to cultural and aesthetic experience indicated that the international graduates had benefited more in this respect. Table 60 presents the tabulated form of their responses. A larger proportion of the international graduates (69.81%) believed their graduate education at AU had contributed "some" to their cultural and aesthetic experience. In addition, another 17% believed their education had contributed "much" to this experience. The responses among the American graduates were "some" (45.83%), "little" (27.08%), and "much" (20.83%).

Table 61 presents an overall picture of the graduates' opinion regarding the contribution their graduate education at AU had made to them. Generally, the graduates perceived their studies at AU to have made "some" to "much" contribution to these itemized intangibles. According to the combined frequencies of the scales "some" and "much," the graduates' education at AU contributed the most to: intellectual growth and stimulus (98); a broader concept of educational problems (95); poise, self-confidence, and balance (88); and cultural and aesthetic experience (79). In terms of "more satisfying social relations," the majority of the graduates (70.3%) rated the contribution as "some" or "little."

TABLE 60
 THE EXTENT TO WHICH THE GRADUATES' EDUCATION
 AT AU HAD CONTRIBUTED TO CULTURAL
 AND AESTHETIC EXPERIENCE

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Nothing	3	6.25	0	0.00	3	2.97
Little	13	27.08	7	13.21	20	19.80
Some	22	45.84	37	69.81	59	58.42
Much	10	20.83	9	16.98	19	18.81
TOTAL	48	100.00	53	100.00	101	100.00

TABLE 61
THE EXTENT OF CONTRIBUTION BY DOCTORAL
EDUCATION AT AU TO CERTAIN FACTORS

	NONE		LITTLE		SOME		MUCH		TOTAL	
	#	%	#	%	#	%	#	%	#	%
Intellectual growth and stimulus	0	.00	4	3.92	29	28.43	69	67.65	102	100.00
A broader concept of educational problems	0	.00	7	6.86	40	39.22	55	53.92	102	100.00
Poise, self-confidence and balance	1	.98	13	12.75	56	54.90	32	31.37	102	100.00
Cultural and aesthetic experience	3	2.97	20	19.80	59	58.42	19	18.81	101	100.00
More satisfying social relations	8	7.92	37	36.63	34	33.67	22	21.78	101	100.00

Consensus of Opinion

Statistically non-significant items that elicited consensus of opinions among the graduates were found on questions 22, 23, 33, 34, and 45. They are described below.

Question 22. Most valuable aspects of the doctoral programs.

The graduates were given a list of aspects about the doctoral programs. They were then requested to choose and rank those aspects which had the most valuable contribution to their professional development. Their responses were tabulated and presented on Table 62. The aspects most frequently selected by the graduates as having made valuable contribution were (frequencies are in parenthesis): dissertation work (76), course work (76), relation to major professor or director of dissertation (58), and independent reading (35). These four aspects were also most often ranked as the most valuable by the graduates.

Question 23. Least valuable aspects of the programs. The graduates' responses to this question were to reflect their perception as to which aspects of their doctoral programs contributed the least to their professional development. With reference to their tabulated responses in Table 63, the aspects most often selected as having made the least contributions were: relation to other students (56), preparation for examination (52), graduate assistantship (51), and research assistantship (48).

Question 33. Present position and graduates' major/minor.

The majority of the graduates indicated their present position to be compatible with their major field of study. Table 64 shows the graduates' assessment of their major/minor fields in terms of

TABLE 62
ASPECTS OF THE DOCTORAL PROGRAMS WHICH MADE
THE MOST VALUABLE CONTRIBUTION TO
PROFESSIONAL DEVELOPMENT

	MOST VALUABLE		2ND MOST VALUABLE		3RD MOST VALUABLE		TOTAL FREQUENCY	
	#	%	#	%	#	%	#	%
Dissertation work	36	47.37	26	34.21	14	18.42	76	100.00
Course work	26	34.21	28	36.84	22	28.95	76	100.00
Relation to your major professor or director of dissertation	22	40.00	16	29.09	17	30.91	55	100.00
Independent readings	11	31.43	11	31.43	13	37.14	35	100.00
Graduate assistantship	2	12.50	5	31.25	9	56.25	16	100.00
Preparation for examinations	1	6.25	6	37.50	9	56.25	16	100.00
Relation to other students	1	9.09	4	36.36	6	54.55	11	100.00
Research assistantship	3	30.00	4	40.00	3	30.00	10	100.00
Other(s)	2	40.00	1	20.00	2	40.00	5	100.00

TABLE 63
ASPECTS OF THE DOCTORAL PROGRAMS WHICH MADE
THE LEAST VALUABLE CONTRIBUTION TO
PROFESSIONAL DEVELOPMENT

	LEAST VALUABLE		2ND LEAST VALUABLE		3RD LEAST VALUABLE		TOTAL FREQUENCY	
	#	%	#	%	#	%	#	%
Relation to other students	24	42.86	9	16.07	23	41.07	56	100.00
Preparation for examinations	20	38.46	16	30.77	16	30.77	52	100.00
Graduate assistantship	24	47.06	16	31.37	11	21.57	51	100.00
Research assistantship	17	35.42	25	52.08	6	12.50	48	100.00
Independent readings	3	10.34	14	48.28	12	41.38	29	100.00
Relation to your major professor or director of dissertation	4	28.57	2	14.29	8	57.14	14	100.00
Course work	0	0.00	3	27.27	8	72.73	11	100.00
Dissertation work	2	28.57	3	42.86	2	28.57	7	100.00
Other(s)	0	0.00	1	50.00	1	50.00	2	100.00

TABLE 64

THE GRADUATES' RESPONSES AS TO WHETHER THEIR
PRESENT POSITION IS ONE FOR WHICH
PARTICULAR PREPARATION WAS MADE
IN THEIR MAJOR OR MINOR FIELD

FIELD PREPARATION	NO		YES		TOTAL	
	#	%	#	%	#	%
Major field	13	36.63	64	63.37	101	100.00
Minor field	27	32.53	56	67.47	83	100.00

relevance to their present position. An average of 65% of the graduates were holding positions that are related to their fields of expertise.

Question 34. Regrets over major fields. The overwhelming majority of the graduates had no regrets over their choice of major /minor fields. Eighty-three percent of the graduates indicated they were satisfied with their field of expertise (Table 65). Only 17% wished they had chosen a different major field.

Question 45. Adequacy of doctoral preparation for other professional duties. Doctoral graduates of the School of Education appear to be well-prepared and competent to assume professional duties and responsibilities. The vast majority of the graduates (85.57%) reported having no other professional duties for which they felt unprepared (Table 66). Only 14 (14.43%) felt some sense of inadequacy in some of their professional responsibilities.

Recommendations for Changes

Questions 44, 47, 48, 49, 50, 51, and 52 with a total of 17 questionnaire items provided graduates the opportunities to voice their opinions or suggestions for the benefit of the doctoral programs. In addition, the graduates had the opportunity to indicate their agreement or disagreement with 30 given items in the section "Criticisms and Suggested Changes" regarding doctoral studies.

Table 67 shows the values of the chi-square (χ^2) analyses conducted on these questionnaire items. Statistically significant items were found on questions 44, 49, 52, and the section on "Criticism and Suggested Changes." Significant items are discussed

TABLE 65

RESPONSES FROM THE GRADUATES INDICATING
WHETHER THEY WISHED THEY HAD CHOSEN
A DIFFERENT MAJOR FIELD OF STUDY

RESPONSES	NUMBER	PERCENT
No	83	83.00
Yes	17	17.00
TOTAL	100	100.00

TABLE 66

OTHER PROFESSIONAL DUTIES AND RESPONSIBILITIES
FOR WHICH AU DID NOT PREPARE THE GRADUATES
ADEQUATELY BUT SHOULD HAVE

RESPONSE	NUMBER	PERCENT
No	83	85.57
Yes	14	14.43
TOTAL	97	100.00

TABLE 67
THE CHI-SQUARE (χ^2) TABLE OF QUESTIONS CONCERNING
CRITICISMS AND SUGGESTIONS FOR CHANGES

Questions	χ^2	df	P	* <.05
44. As you consider your doctoral program in retrospect, where, if at all would you suggest changes in the aspects listed below:				
Qualifications for admission	5.299	3	.151	
Course requirements	.474	3	.925	
Research training	9.541	3	.023	*
Dissertation	4.265	3	.234	
Independent work	1.077	3	.783	
Major field	4.986	3	.173	
Minor fields	9.225	3	.026	*
Supervised college teaching	5.193	3	.158	
Residence requirements	5.301	3	.151	
Final defense of dissertation	6.759	3	.080	
General quality of doctorate	4.505	2	.105	
47. What suggestion or criticism do you have regarding the admission requirements?	7.725	5	.172	
48. What suggestion or criticism do you have regarding the written comprehensive examination?	5.832	4	.212	
49. What suggestion or criticism do you have regarding the spiritual life/experience on AU campus?	21.996	7	.003	*
50. What suggestion or criticism do you have regarding the final oral examination in which you defended your dissertation?	8.348	8	.400	
51. What suggestion do you have to make the dissertation experience more valuable?	1.860	8	.985	
52. What recommendation(s) would you like to make to the School of Education for the improvement of the doctoral programs?	27.246	12	.007	*

TABLE 67--Continued

CRITICISM AND SUGGESTED CHANGES	χ^2	df	p	* <.05
1. Graduate students should be encouraged to select courses in several widely separated non-major fields instead of the traditional minor(s)/(cognate).	4.983	4	.289	
2. Foundation courses in such broad fields as the humanities, physical sciences, and the social sciences should be carried with graduate credit to enable doctoral candidates to round out their general education in areas not included in earlier study.	1.029	5	.960	
3. A basic course in statistics should be required only when needed in the doctoral candidate's research program.	1.841	4	.765	
4. Doctoral candidates preparing for college teaching do not get enough training in teaching during their doctoral programs.	9.552	5	.089	
5. Doctoral programs should be "loosened" by putting more responsibility upon the student and giving him greater voice in outlining his course of study.	6.366	4	.173	
6. There is too little provision for social contacts among graduate students, creating isolation and unhappiness.	6.631	4	.157	
7. Graduate students are not well counseled at the beginning of their program with the result that they often do not know just what they must do to complete the degree.	6.353	4	.174	
8. Doctoral programs should be "tightened" and all students put through a stringent program of study much as medical and law schools now do.	1.307	4	.860	
9. Doctoral training for research is inefficient and wasteful of both students and faculty because few recipients of the degree become productive research scholars.	2.476	5	.780	
10. The doctoral dissertation is too often a mere exercise rather than a real intellectual experience and a contribution to useful knowledge.	4.805	4	.308	
11. Doctoral work is too much concerned with professional training in skills rather than with academic work oriented to scholarship.	3.751	4	.586	

TABLE 67--Continued

CRITICISM AND SUGGESTED CHANGES	χ^2	df	P	* <.05
12. The final oral exam defending the dissertation has become a mere ritual and serves no useful purpose.	3.248	4	.517	
13. The graduate schools give undue stress to research and neglect the task of properly preparing college teachers.	6.185	5	.289	
14. Doctoral programs are too specialized and lacking in breadth.	5.916	5	.315	
15. A basic fault with the graduate program is that faculty members consider their own research, consulting work, administrative duties, etc., as their main responsibility, with the needs of students coming second.	.799	4	.939	
16. The doctoral programs, as they are now organized, create too much needless anxiety in many students.	2.032	5	.845	
17. The basic course in curriculum is necessary in the program only for students who expect to go into school work at the elementary or secondary level.	2.920	5	.712	
18. Doctoral candidates are too often encouraged or allowed to undertake dissertation projects that are too ambitious for completion within a reasonable length of time.	5.604	4	.231	
19. The course in measurement should be required only for students who will have definite use of measurement techniques and practices in their chosen major field.	.962	4	.916	
20. The requirement of a basic course in philosophy of education is not necessary for graduate students whose major field and dissertation are not specifically concerned with philosophy.	2.852	4	.583	
21. The basic course in advanced educational psychology is not needed for students whose field will not take them out of active teaching.	4.645	4	.326	
22. The doctoral dissertation should be regarded primarily as a training exercise in research rather than as a serious and original contribution to knowledge.	1.853	5	.869	
23. Some portions or forms of the dissertation should be published in a professional journal before the doctoral candidate is granted the doctorate degree.	7.599	3	.055	

TABLE 67--Continued

CRITICISM AND SUGGESTED CHANGES	χ^2	df	p	* <.05
24. Doctoral programs for foreign students should be more flexible in keeping with their varying national needs.	14.877	4	.005	*
25. All doctoral candidates should be required to do some teaching under supervision during their doctoral work.	4.918	4	.296	
26. Two programs should be set up for the doctorate --one for researchers and one for teachers, with research left out of the program for teachers.	3.644	4	.456	
27. There should be two sets of standards: one for foreign (international) students, and another for the American students.	3.414	4	.491	
28. The number of faculty in the doctoral programs should be increased.	3.003	5	.700	
29. The faculty members are generally not accessible or available to the students.	5.997	5	.307	
30. The number of international students at the doctoral level should be limited.	10.885	4	.028	*

first, followed by discussions of items that elicited consensus of opinions from the graduates.

Differences of Opinion

Question 44. The graduates were given a list of aspects pertaining to their doctorate and then asked if they had any suggestions for changes. Differences of opinions were found on two aspects: research training and the minor field. They are discussed below.

Table 68 is the contingency table indicating the frequency distribution of the graduates' responses to the item pertaining to research training. The major difference here is that a larger percentage of the international graduates (46.15%) suggested the requirements for research training to be increased. Only 27% of the American graduates would like to see the research training requirements increased. In fact, there were six (12.25%) American graduates who would like to see the research training requirements relaxed as compared to none among the international graduates. As a group, however, the graduates (54.46%) thought the requirements were "ok as is."

Table 69 shows the distribution of responses regarding possible changes in the minor field. The difference here is that the American graduates (82.98%) preferred no changes at all. In contrast, there were more among the international graduates (15.38) who would prefer an increase of requirements. As a collective unit, however, the graduates (73.74%) indicated no desire for any changes in the field.

TABLE 68

SUGGESTED CHANGES FOR RESEARCH TRAINING

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Would relax requirements	6	12.25	0	0.00	6	5.94
Ok as is	28	57.14	27	51.93	55	54.46
Would increase requirements	13	26.53	24	46.15	37	36.63
No opinion	2	4.08	1	1.92	3	2.97
TOTAL	49	100.00	52	100.00	101	100.00

TABLE 69

SUGGESTED CHANGES FOR MINOR FIELD

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Would relax requirements	3	6.38	6	11.54	9	9.09
Ok as is	39	82.98	34	65.39	73	73.74
Would increase requirements	0	0.00	8	15.38	8	8.08
No opinion	5	10.64	4	7.69	9	9.09
TOTAL	47	100.00	52	100.00	99	100.00

The graduates' responses to the rest of the listed items on question 44 are shown on Table 70. In general, the majority of the graduates indicated their satisfaction with these items. The sole exception is on supervised college teaching in which only 34 (36.17%) graduates were satisfied, and close to 40% had no opinion. This may have been due to the lack or absence of supervised college teaching in their programs. The percentage of graduates who indicated satisfaction ranged from 53% with independent work to 91% with the final oral defense of the dissertation.

Such indications of satisfaction are reflected in the limited calls for either relaxation or increment of requirements. The most frequent calls for relaxation of requirements were on residence requirements (14) and course requirements (10). There were also calls to increase the requirements on major fields (36), independent work (32), and the general quality of the doctorate (25).

Question 49. Spiritual life/experience on campus. Table 71 shows the graduates' comments about the spiritual life on AU campus. It appears that the American graduates were more satisfied with the campus spiritual life than the international graduates. Thirty-nine percent of the American graduates indicated being very satisfied with the campus religious life, as compared to only 5% among the international graduates. Twenty-nine percent of the international graduates rated the campus life as "ok," as compared to 6% among the American graduates. There were also calls from the international graduates for more pastoral visits to their apartments and for fellow church members to show more caring.

TABLE 70
THE GRADUATES' SUGGESTIONS FOR CHANGES IN CERTAIN
ASPECTS OF THEIR DOCTORAL PROGRAMS

	WOULD RELAX REQUIREMENTS		OK AS IS		INCREASE REQUIREMENTS		NO OPINION		TOTAL	
	#	%	#	%	#	%	#	%	#	%
Qualifications for admission	1	1.03	76	78.35	15	15.46	5	5.15	97	100.00
Course requirements	10	9.90	64	63.37	24	23.76	3	2.97	101	100.00
Dissertation	1	.99	86	85.15	11	10.89	3	2.97	101	100.00
Independent work	4	3.96	54	53.47	32	32.68	11	10.89	101	100.00
Major field	1	.99	57	56.44	36	35.64	7	6.93	101	100.00
Supervised college teaching	1	1.06	34	36.17	22	23.40	37	39.36	94	100.00
Residence requirements	14	14.43	65	67.01	2	2.06	16	16.49	97	100.00
Final defense of dissertation	5	4.10	89	90.82	2	2.04	2	2.04	98	100.00
General quality of doctorate	0	.00	73	73.00	25	25.00	2	2.00	100	100.00

TABLE 71
SUGGESTIONS OR CRITICISMS REGARDING THE SPIRITUAL
LIFE/EXPERIENCE ON AU CAMPUS

SUGGESTIONS OR CRITICISMS	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Students need pastoral visits	0	.00	3	7.89	3	5.36
It is ok	1	5.56	11	28.95	12	21.43
Very pleased with it	7	38.89	2	5.26	9	16.07
It's an individual duty	1	5.56	2	5.26	3	5.36
Show more caring	0	.00	4	10.53	4	7.14
All should take religion classes	2	11.11	0	.00	2	3.57
Not enough attention to spiritual life	0	.00	5	13.16	5	8.93
Others	7	38.88	11	28.95	18	32.14
TOTAL	18	100.00	38	100.00	56	100.00

Question 52. Recommendations for improvements. This was an open-ended question in which the graduates were given an opportunity to voice their concerns about the doctoral programs and provide the School of Education with recommendations to improve them. Table 72 shows the frequency distribution of the graduates' responses. The differences in the international and American graduates' responses were the following:

There were more American graduates who were concerned about the lack of reputation and recognition--even among Adventist institutions--of the doctoral degrees offered by the School of Education. They also called for more class offerings, flexibility of class selections, and for faculty to keep current in their fields.

The international graduates, on the other hand, called for more practical training, field trips, and seminars with well-known guest speakers. The rest of the suggestions (63.33%) were too varied to have any identifiable pattern or common elements. They ranged from warnings of pitfalls they themselves had suffered to specific instructions on improving certain aspects of the programs.

Criticism and suggested changes. This section of the questionnaire dealt with 30 issues pertaining to doctoral programs in education. They were presented in criticism or suggestion form, and the graduates were requested to indicate their opinion on each of them using the scale of: disagree strongly, disagree, no opinion or can't say, agree, and agree strongly. Chi-square analyses yielded two issues that elicited statistically contrasting opinion from the two groups of graduates. They were: "Doctoral programs for foreign students should be more flexible in keeping with their varying

TABLE 72

THE GRADUATES' RECOMMENDATIONS FOR THE
IMPROVEMENT OF THE DOCTORAL PROGRAMS

RECOMMENDATIONS	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Needs more reputation and recognition	5	9.81	0	.00	5	4.17
Needs more international faculty or faculty with knowledge about other countries	1	1.96	3	4.34	4	3.33
More practical training and field trips	1	1.96	6	8.70	7	5.83
More class offerings and flexibility of class selection	3	5.88	2	2.90	5	4.17
More guest speakers and seminars	0	.00	6	8.70	6	5.00
Need to be less parochial	0	.00	2	2.90	2	1.67
Keep current with trends	3	5.88	0	.00	3	2.50
Good as is	3	5.88	0	.00	3	2.50
Improve student-committee interaction	1	1.96	2	2.90	3	2.50
Be relevant to present needs	0	.00	2	2.90	2	1.67
Keep up academic excellence and standards	1	1.96	2	2.90	3	2.50
Others	33	64.71	44	63.76	77	64.16
TOTAL	51	100.00	69	100.00	120	100.00

national needs," and "The number of international students at the doctoral level should be limited." These are further discussed below.

The graduates' opinions regarding the suggestion that more program flexibility be afforded to international students to cater for their varying national needs are shown on Table 73. Over half (57.7%) the respondents "agreed" or "agreed strongly" that the international students do indeed need more flexibility in structuring their program in accordance to their national needs. The difference is that there were more international graduates (69.81%) who desired such flexibility. Only 45% of their American counterparts agreed with them.

The graduates' opinions regarding the suggestion that the number of international students be limited at the doctoral level are shown on Table 74. The majority of the graduates (68.26%) did not agree with the suggestion. The difference is that the international graduates appeared more united in their oppositions to such a suggestion. Seventy-nine percent of the international graduates were opposed to this suggestion as compared to only 57% among the American graduates.

Consensus of opinion and other results

The graduates' responses to the open-ended questions 46, 47, 48, 50, and 51 are presented below. Furthermore, items from the questionnaire section "Criticism and Suggested Changes" that elicited consensus of opinion from the graduates are also discussed.

Question 46. Honors, awards, grants, etc. Only 25 graduates indicated having received some forms of honors, awards, grants, or

TABLE 73

RESPONSES TO THE SUGGESTION THAT DOCTORAL
PROGRAMS FOR FOREIGN STUDENTS BE MORE
FLEXIBLE IN KEEPING WITH THEIR
VARYING NATIONAL NEEDS

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Disagree strongly	2	3.92	4	7.55	6	5.77
Disagree	10	19.61	10	18.87	20	19.23
No opinion or can't say	16	31.37	2	3.77	17	17.31
Agree	17	33.33	26	49.06	43	41.34
Agree strongly	6	11.77	11	20.75	17	16.35
TOTAL	51	100.00	53	100.00	104	100.00

TABLE 74

RESPONSES TO THE SUGGESTION THAT THE NUMBER OF
INTERNATIONAL STUDENTS AT THE DOCTORAL
LEVEL BE LIMITED

RESPONSES	AMERICANS		INTER- NATIONALS		TOTAL	
	#	%	#	%	#	%
Disagree strongly	11	21.57	24	45.28	35	33.65
Disagree	18	35.29	18	33.96	36	34.61
No opinion or can't say	12	23.53	6	11.32	18	17.31
Agree	6	11.77	5	9.44	11	10.58
Agree strongly	4	7.84	0	0.00	4	3.85
TOTAL	51	100.00	53	100.00	104	100.00

fellowships since completing their doctorates (Table 75). Seventeen of them were American graduates and eight were international graduates.

Question 47. Admission requirements. This question elicited a total of 38 responses from the graduates. Twenty-eight of them were tabulated under five categories as shown on Table 76. There were 10 responses that expressed satisfaction with the admission requirements as they are. Ten called for the admission requirements to be tightened. There were five complaints about the lengthy admission process for international students. There were also perceptions that the admission requirements are biased against international students.

Question 48. Comprehensive examination. Table 77 presents the graduates' suggestions or criticisms regarding the comprehensive examination. Fifteen assessed it as "ok." Thirteen criticisms were directed at the length of the examination. They thought it was too long, and served only to test the students' physical endurance. Three described the examination experience as excellent, while another three thought examinations are not necessary at the doctoral level. There were 29 other responses with no common elements among them.

Question 50. Oral defense. The graduates' responses to this question were tabulated and presented on Table 78. Four of the responses were descriptive of the graduates' own experience: 14 rated the experience as "ok," seven enjoyed it, four described it as excellent, and three others encountered no problem with it.

TABLE 75

GRADUATES WHO HAVE RECEIVED HONORS
IN THEIR PROFESSION

	NUMBER	PERCENT
American graduates	17	68.00
International graduates	8	32.00
TOTAL	25	100.00

TABLE 76

OPINIONS REGARDING THE ADMISSION REQUIREMENTS

SUGGESTION/CRITICISM	NUMBER	PERCENT
They are ok	10	26.32
Should be tightened	6	15.78
The process takes too long	5	13.16
Too relaxed	4	10.53
Used to screen out international students	3	7.89
Others	10	26.32
TOTAL	38	100.00

TABLE 77

OPINIONS REGARDING THE COMPREHENSIVE EXAMINATION

SUGGESTION/CRITICISM	NUMBER	PERCENT
Ok	15	23.81
Too long, a test of physical endurance	13	20.64
Excellent experience	3	4.76
Not necessary	3	4.76
Others	29	46.03
TOTAL	63	100.00

TABLE 78

OPINIONS REGARDING THE ORAL DEFENSE

SUGGESTION/CRITICISM	NUMBER	PERCENT
Ok	14	26.92
Enjoyable experience	7	13.46
Excellent experience	4	7.69
No problem	3	5.77
More committee meetings before defense	3	5.77
Committee members should read the dissertation before the defense	3	5.77
Committee members need not be too adversarial	2	3.85
No need for observer (American grandstanding)	2	3.85
Others	14	26.92
TOTAL	52	100.00

The following suggestions were offered by the graduates regarding the oral defense of the dissertation (frequency of mention is in parenthesis): more committee meetings before the defense (3), committee members should take time to carefully read the dissertation before the defense (3), and committee members who had been part of the dissertation development should be less antagonistic (2). There was also a suggestion from two international graduates to end the practice of inviting onlookers. They perceived this practice as an unnecessary and typical American grandstanding.

Question 51. Dissertation experience. The graduates suggestions for making the dissertation experience more valuable were tabulated and shown on Table 79. There were seven graduates who described the dissertation-writing experience as enjoyable. Seven graduates suggested that doctoral students should be provided a place and opportunity to share their experience with each other. This could also serve as a support group for the students. Six suggested that doctoral students receive closer guidance and supervision. There was also a suggestion (6) for the committee to meet more often to discuss the progress of the dissertation. Other suggestions that had at least three frequency counts were: early selection of dissertation topic, earlier preparation or acquisition of skills in writing research papers, careful selection of committee members and chairperson, and closer rapport with the advisors.

Criticism and suggested changes. Twelve of the other listed issues pertaining to doctoral programs in education drew consensus of opinion from the graduates. They are shown on Table 80. They have been arranged in descending order of their disagreement or agreement

TABLE 79
SUGGESTIONS FOR MAKING THE DISSERTATION
EXPERIENCE MORE VALUABLE

SUGGESTIONS	NUMBER	PERCENT
Enjoyable experience	7	9.33
Share experience with other doctoral students	7	9.33
Closer guidance and supervision	6	8.00
Committee should meet more often	6	8.00
Early selection of topic	3	4.00
Earlier preparation in writing research papers	3	4.00
Select committee members and chairman carefully	3	4.00
Closer rapport with advisor	3	4.00
Others	37	49.33
TOTAL	75	100.00

TABLE 80
THE GRADUATES' RESPONSES TO CRITICISMS AND SUGGESTED CHANGES

	Disagree strongly		Disagree		No opinion/ can't say		Agree		Agree strongly		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%
There should be two sets of standards: one for foreign (international) students, and another for the American students.	54	51.92	34	32.69	5	4.81	5	4.81	6	5.77	104	100.00
The requirement of a basic course in philosophy of education is not necessary for graduate students whose major field and dissertation are not specifically concerned with philosophy.	47	45.19	41	39.42	3	2.88	9	8.65	4	3.85	104	100.00
A basic course in statistics should be required only when needed in the doctoral candidate's research program.	32	30.77	49	47.12	1	.96	10	9.62	12	11.54	104	100.00
The final oral exam defending the dissertation has become a mere ritual and serves no useful purpose.	17	16.35	61	58.65	6	5.77	16	15.38	4	3.85	104	100.00
The doctoral dissertation should be regarded primarily as a training exercise in research rather than as a serious and original contribution to knowledge.	34	33.00	43	41.75	8	7.77	16	15.53	2	1.94	103	100.00
A course in advanced educational psychology is not needed for students whose field will not take them out of active teaching.	37	35.58	39	37.50	17	16.35	10	9.62	1	.96	104	100.00

TABLE 80--Continued

	Disagree strongly		Disagree		No opinion/ can't say		Agree		Agree strongly		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%
Some portions or forms of the dissertation should be published in a professional journal before the doctoral candidate is granted the doctorate degree.	31	29.81	45	43.27	16	15.38	12	11.54	0	.00	104	100.00
The course in measurement should be required only for students who will have definite use of measurement techniques and practices in their chosen major field.	15	14.42	60	57.69	6	5.77	18	17.31	5	4.81	104	100.00
Doctoral programs are too specialized and lacking in breadth.	12	11.65	60	58.25	16	15.53	13	12.62	2	1.94	103	100.00
Two programs should be set up for the doctorate -- one for researchers and one for teachers, with research left out of the program for teachers.	17	16.35	55	52.88	17	16.35	10	9.62	5	4.81	104	100.00
The faculty members are generally not accessible or available to the students.	19	18.45	51	49.51	15	14.56	17	16.51	1	.97	103	100.00
Doctoral training for research is inefficient and wasteful of both students and faculty because few recipients of the degree become productive research scholars.	14	13.73	55	53.92	15	14.70	14	13.73	4	3.92	102	100.00

frequencies. Further descriptions of the graduates' opinion on the 12 issues are presented below.

The majority of the graduates were opposed to the suggestion that there be two sets of standards: one for international students and another one for the American students. There were 54 (51.92%) who disagreed strongly and 34 (32.69%) who disagreed with this suggestion. Only 11 (10.58%) graduates thought the suggestion was a good idea. This means the graduates were opposed to double standards.

Eighty-eight (84.61%) of the respondents disagreed or disagreed strongly to the suggestion that a basic course in philosophy in education is not necessary for students whose major field and dissertation are not specifically concerned with philosophy. In other words, the graduates are in favor of a required course in philosophy of education.

The majority of the graduates (77.89%) disagreed or disagreed strongly with the statement that a basic course in statistics should be required only when needed in the student's research program. Only 21% of the graduates favored such an arrangement in their doctoral programs. This result is consistent with the graduates' appreciation and satisfaction with the statistics and research training offered or required by the doctoral programs (see question 18, 44, and the section on competencies).

A majority of 61 (58.65%) disagreed, and 17 (16.35%) disagreed strongly with the criticism that the final oral defense of the dissertation has become a mere ritual and serves no useful purpose. Less than a fifth (19.23%) of the graduates gave credence

to the criticism. This means the graduates do attach significance and value to their oral defense experience.

A 75% majority of the graduates disagreed or disagreed strongly with the suggestion that the doctoral dissertation be regarded primarily as a research exercise rather than a serious and original contribution to knowledge. Again, less than a fifth of the graduates (17.47%) preferred such a suggested arrangement in their programs.

The suggestion that a course in advanced educational psychology is not needed for those students who will not go into the teaching profession was opposed by the majority of the graduates (73.08%). Only 10% of the graduates favored this suggestion, and another 16% had no opinion. It can be concluded that the graduates were in favor of a basic requirement in educational psychology for every doctoral student.

The majority of the graduates (73.08%) also opposed the suggestion that some portion of the dissertation be published in a professional journal before the doctoral candidate is granted the degree. There were comments to the effect that such a procedure might be too long to be practical. Only 12 (11.54%) graduates agreed with the suggestion.

A majority of 60 (58.25%) disagreed and 15 (14.41%) others disagreed strongly that a course in measurement be required only for students who will have definite use of the techniques in their chosen fields. Over a fifth (22.12%) of the graduates agreed with the suggestion.

The criticism that doctoral programs are too specialized and lacking in breadth was rejected by 72 (69.90%) graduates. Only 15 (14.43%) graduates indicated their agreement with this criticism. This indicates that the graduates perceived the doctoral programs to have sufficient breadth and depth.

The majority of the graduates (69.23%) were also opposed to the suggestion of setting up two programs for the doctorate: one for researchers and another for teachers, with research left out for teachers. There were only 15 (14.42%) graduates who preferred such a set up.

Another consensus of opinion was reached among the graduates on the criticism that faculty members are not accessible or available to the students. The majority of the graduates (67.96%) rejected this criticism. Only 18 (17.47%) indicated having encountered the problem of faculty inaccessibility or unavailability.

Sixty-nine (67.65%) graduates rejected the criticism that doctoral training for research is inefficient and wasteful for both students and faculty because few graduates become research scholars. In contrast, 18 (17.65%) graduates thought the allegation was accurate.

Summary

This chapter presented the data and their analyses. 235 items were tested by chi-square analysis with alpha set at .05. Only 31 items were found to statistically significant and hence rejected according to their respective null hypotheses.

It was also found during the course of the data analyses that consensus of opinion among the graduates was evident on other

statistically non-significant questionnaire items. These items were also presented.

Discussions of these findings are presented in Chapter 5.

CHAPTER V

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary, discussion of the findings, conclusions, and recommendations. The summary briefly reviews the purpose of the study, related literature, methodology, and findings from the data analyses. The findings were the basis for the conclusions reached and recommendations given.

Summary

Purpose of the Study

The purpose of this study was to investigate possible differences between the international and American doctoral graduates' appraisals of their programs in the School of Education at Andrews University. The investigation focused on: (1) the students' expectations of the programs, (2) the actual programs and the graduates' satisfaction with them, (3) the graduates' professional growth, and (4) the appropriateness or relevance of the graduates' academic preparations to their professional careers.

An Overview of Related Literature

The literature review covered four areas: (1) background information of the doctoral degree recipients of American universities, (2) studies done on international doctoral graduates

and other related studies on international students attending American colleges and universities, (3) follow-up studies on graduates of doctoral programs in education and on their appraisals of the programs, and (4) related studies on Adventist universities.

Doctoral graduates of American universities. Longitudinal data on doctoral graduates kept by the National Research Council (1978, 1981, 1982, 1983, and 1986) revealed that the graduates generally came from well-educated families. They usually completed their doctoral studies while they were in their early 30s, although graduates in education tended to be slightly older. Geographic proximity and the availability of desired programs usually influenced their decision to attend the institution of their choice.

The 1980s saw notable trends such as the sharp increase in the proportion of women doctoral graduates. In the field of education, women have been outnumbering men since 1983. The proportion of international graduates also grew.

International students. The literature review revealed a paucity of studies on international doctoral graduates of American universities, especially in the last 20 years. Moreover, comparative studies of international and American doctoral graduates in education were not found.

Problems usually faced by international students at all levels were: (1) the use of the English language, (2) re-adjustment problems associated with being in a new place and country, and (3) the different educational expectations and procedures of the host country. Proper orientation was thought of as the most effective

means of helping international students anticipate and deal with these problems.

International students were also reported to have experienced re-adjustment problems upon returning home. However, the majority of them were gainfully employed, often times in better and higher paying positions.

Doctoral graduates appraisals of their programs. Doctoral graduates in education have, in retrospect, thought very well of their programs. The majority of them expressed their satisfactions with their programs. They also believed their doctoral studies adequately prepared them for their professional careers.

The most frequently cited motives for pursuing the doctorate were: opportunity for greater self-fulfillment, desire to become better practitioners in their fields, the possibilities for new positions, and the desire to work at the college level.

The graduates' criticisms about their programs were varied. Among the persistent complaints were: the language, residency, and statistics requirements; and the lack of practical experience. According to the graduates, the strengths of any doctoral programs were associated with the quality of the faculty.

International students and Adventist universities. Two studies dealing with international students at two Adventist universities were found and reviewed. Both studies found that the overwhelming majority of the students at these Adventist universities were Seventh-day Adventists. This common factor rendered a unique homogeneity to the otherwise multi-cultural student body. Minimum

differences in the students' perception of their campus environments were attributed to this common factor.

Methodology

This was an ex-post facto study to compare the international and American doctoral graduates' appraisals of their programs in the School of Education at Andrews University.

Data for this study were obtained from two primary sources: Andrews University's Institutional Research Office and the graduates' responses to mailed questionnaires.

The 151 doctoral graduates of the School of Education since its inception in 1974 to the 1986 Summer graduation constituted the total population of the study. Survey questionnaires were sent to 143 graduates with known addresses. Responses were received from 104 graduates, which represented a return rate of 72.7%.

Data obtained from Andrews University were downloaded from the University's Xerox mainframe computer to an IBM Personal Computer. They were later converted to a SuperCalc 3 Version 2 file. This procedure helped facilitate tabulation and computations of data and descriptive analyses.

Responses to the questionnaire items by the 104 respondents were computer coded and input into data files on the Andrews University's Xerox mainframe computer. Responses to the open-ended questions, however, were managed separately using a dBase III Plus data base management software on a micro-computer.

Chi-square statistical analyses with alpha set at .05 were conducted to determine differences between the responses of the international and American graduates. The Biomedical Computer

Programs P-series (BMDP) statistical package facilitated the analyses. Yate's corrected chi-square values were used for all 2x2 (2 rows and 2 column , $df = 1$) tables with expected cell frequencies of less than 5.

Summary of Findings

The major findings of this study are summarized and presented below.

Background Information of the Population

Analyses of the graduates' background information revealed the following: The graduates were mostly (90.1%) Seventh-day Adventists. They came from a total of 47 countries. There were more international graduates (52.7%) than American graduates (47.3%). The graduates were predominantly men, although there were more women (30.6%) among the American graduates. The average age of the graduates at the time of graduation was 43.4 years. The majority of them (79.5%) received the Ed.D degree. Only 31 (20.5%) received the Ph.D. degree. The two groups of graduates did equally well academically as measured by their identical Cumulative Grade-Point Average (CGPA).

Responses to Questionnaire

There were 235 items in the survey questionnaire. A total of 31 items were found to be statistically significant and were rejected under their respective null hypotheses. This indicated only minimal number of differences between the international and American graduates' appraisals of their programs.

Hypothesis One

There is no significant difference between the international and American students' expectations of the doctoral programs prior to the commencement of their studies.

There were 11 questions with 58 items that addressed this hypothesis. Thirteen statistically significant items were found on six of these questions. Hypothesis One was rejected for these 13 items but retained for the rest of the items.

There were significantly more American graduates who expected the following as a result of their doctorate: possibilities of going into other kinds of positions, better opportunity for promotions, and enhanced prestige. A higher proportion of the international graduates expected it to contribute to the growth of their profession.

The American graduates tended to choose AU because they happened to be living nearby. The majority of the international graduates (90.57%), on the other hand, chose to attend AU because it is a Seventh-day Adventist university. Differences aside, the graduates' main motives as a single group were: the desire to become better practitioners in their fields; desire to learn new techniques, procedures, and skills; and opportunity for greater self-fulfillment.

Differences were also found in the way they financed their doctoral studies. More of the American graduates (54.90%) cited their full-time jobs as their financial resources. Just over half (50.96%) the international graduates were sponsored by Seventh-day Adventist organizations.

The American graduates indicated having "very much" more knowledge about the American educational system and the kind of

living arrangements they were going to find upon arriving at AU than the international graduates. Otherwise, the graduates appear to have had sufficient pre-arrival information about AU.

The majority of the graduates perceived the Ph.D. degree to be more prestigious than the Ed.D. degree. Since the Ph.D. program was not offered until 1982, the majority of the graduates received the Ed.D. degree.

Hypothesis Two

There is no significant difference in the levels of satisfaction experienced by international and American graduates in terms of the actual programs offered.

There were 20 questions with 77 items that pertained to this hypothesis. Five items were statistically significant. Hypothesis Two was rejected for these five items but retained for the rest of the items.

The problem most often encountered by the graduates were financial, academic, and personal problems. The international graduates appear to have had more difficulties financing their studies.

According to the graduates, they were most likely able to get help in solving these problems from their dissertation chairman, other members of the dissertation committee, and department chairman.

An overwhelming majority of the American graduates (88%) thought the School of Education was attempting to meet the needs of its international doctoral students. This assessment was shared by the majority of the international graduates (60.38%). However, a small but significant proportion of the international graduates (22.6%) thought their needs were, in fact, not being met.

Fifty-two percent of the graduates believed their American doctoral degrees have the same prestige value as comparable European degrees. However, less than half (49.51%) the graduates compared their AU degrees as favorably as those offered by other American universities. The international graduates tended to compare their degrees favorably with those of other American universities.

The majority of the graduates had input into the dissertation topic selection process. They also reported getting sufficient help and supervision from their advisors during the writing process. The majority of the graduates also viewed the dissertation-writing process as intellectually enlightening.

The most frequently cited strengths of the doctoral programs were: Christian education and atmosphere offered, the faculty, personal attention given to students, statistics and research training, library facilities, small size, and the integration of faith and learning. The perceived weaknesses of the programs were: constantly shifting policies and requirements, overloaded professors, lack of research activities on the part of the faculty, and the lack of flexibility due to limited course offerings.

The competencies most useful to the graduates in their daily professional life appear to be related to their mastery over their field of specialization, communication skills, and leadership abilities. The doctoral programs were perceived to have contributed to research-related competencies and understanding of their major field of specialization.

The graduates rated the faculty high on their sensitivity to students' needs and their knowledge. Conversely, they were rated low

on publishing and research activities. As for the quality of instruction, the faculty were rated favorably with up to 61% of their instruction rated either above average or superior.

Overall, the doctoral programs were rated above average or among the best by 76% of the graduates. Specifically, the graduates expressed their satisfaction and approval on: the facilities such as classrooms, study areas, and the library; faculty-student relationships; the extent to which the doctoral programs measured up to their pre-arrival expectations; quality of faculty and staff; and the student-student interactions.

The majority of the graduates believed their doctorates were worth striving for. However, given the opportunity to do their doctorate all over again, only about half the graduates would attend AU. In spite of this, the overwhelming majority of them would recommend the programs to others.

Hypothesis Three

There is no significant difference in the professional growth experienced by international and American graduates after their doctoral studies.

Twelve questions with 26 items were set to address this hypothesis. Five items were found to be statistically significant. Hypothesis Three was rejected for these five items but retained for the rest of the items.

The overwhelming majority (93.27%) of the graduates are presently employed full-time. Among those currently employed, a higher proportion of the international graduates (79.25%) are presently working for the Seventh-day Adventist denomination. In

comparison, only about half (50.98%) of the American graduates are working for the Adventist denomination.

The American graduates (68.63%) tended to return to the positions they held before or during their doctoral studies. In contrast only 45% of the international graduates returned to their former positions. In general, the graduates appear satisfied with their present positions.

Differences also existed in the graduates perceptions of their status as a result of their doctorate. The international graduates tended to experience greater acceptance socially because of their doctorate than the their American counterparts.

The American graduates tended to belong to more than one professional organizations. The majority of the international graduates (60.38%) belonged to only one professional organization. Apparently, less than half the graduates involved themselves in the given list of professional activities that included publishing books and committee memberships. The majority, however, did report involvement in public speaking in their fields of expertise.

The American graduates earned more per year than the international graduates. About 75% of the American graduates earned US\$24,000 or more per year, whereas more than half of the international graduates (57.7%) earned US\$15,000 or less. Another 37% of the international graduates earned less than US\$10,000 per year. As to whether they experienced any salary increase, the majority did not. Only 10% reported such gains.

Hypothesis Four

There is no significant difference in the perceived appropriateness of the international and American graduates' academic preparation for their post-doctoral professional careers.

Six questions with 27 items were set to test this hypothesis. Two items from these questions were statistically significant. Hypothesis Four was rejected for the two items but retained for the rest of the items. Again, the differences were minimal and the graduates had more occasion to agree than differ.

Generally, the graduates perceived their studies at AU to have contributed to intellectual growth and balance; poise, self-confidence, and balance; and cultural and aesthetic experience. However, there were statistical indications that the international graduates were more satisfied with their education's contribution to cultural and aesthetic experience and their concept of educational problems than the American graduates.

According to the graduates, the following aspects of their studies contributed most to their professional development: dissertation work, course work, relation to major professor or director of dissertation, and independent reading. Aspects that contributed least were: relation to other students, preparation for examination, graduate assistantship, and research assistantship.

Eighty-three percent of the graduates were satisfied with their choice of major fields for their doctorate. They also felt they were adequately prepared for their professional duties and responsibilities. Furthermore, the majority of them also indicated that their field of study are relevant to their present positions.

Suggestions for Changes

The graduates were given the opportunities to voice opinions that would hopefully benefit the doctoral programs of the School of Education. Seven questions with 17 items and the entire section on "Criticism and Suggested Changes", which had 30 items, facilitated this endeavor. Only six items were found to be statistically significant.

The graduates were given a list of aspects pertaining to their doctorate and asked for their suggestions for changes. The list ranged from the admission requirements to the general quality of the programs. In general the graduates were satisfied with the listed aspects as they were, especially on the final defense of the dissertation, qualification for admission, and the general quality of the doctorate.

The international graduates were less satisfied with the spiritual life on campus. They also complained about the lack of pastoral visits.

With respect to the admission requirements, there were complaints from the international graduates about the lengthy process, and the perceived biases of some of the requirements against international students.

The most common concern about the comprehensive examination was "it was too long." They thought it was an attempt to test their physical endurance.

As for the oral defense of the dissertation, the graduate suggested that: committee members take time to carefully read the

dissertation and there should be more committee meetings before the final oral defense.

Suggestions for making the dissertation experience more valuable included: providing the place and opportunity for doctoral students to interact and share their experience with other doctoral candidates, increased guidance and supervision, more committee meetings to review the progress of the dissertation, and earlier selection of dissertation topics.

The graduates were given a list of criticisms and suggestions for changes concerning doctoral studies in general. They were then solicited for their reactions.

The graduates emphatically disagreed with the following: there should be two sets of standards, one for the international students and another for the American students; a basic course in philosophy of education is not necessary for students whose major field and dissertation are not concerned with philosophy; and a basic course in statistics should be required only if needed by the candidates' research.

The graduates also rejected the following criticisms: the final oral defense of the dissertation has become a mere ritual with no apparent useful purposes; doctoral programs are too specialized and lack breadth; faculty members are usually not accessible to students; and doctoral research training is wasteful since few graduates become research scholars.

The majority of the graduates and in particular the international graduates agreed that some flexibility be given to

international doctoral students in structuring their programs according to their national needs.

The graduates also saw no reason for limiting the number of international students at the doctoral level.

Recommendations to the School of Education were sought from the graduates. Statistically more American graduates expressed their concern about the lack of reputation and recognition--even among Adventist institutions--of the doctoral programs offered by the School of Education. They also called for more class offerings, flexibility of class selections, and for faculty to keep current in their fields. The international graduates, on the other hand, called for more practical training, field trips, and seminars with well-known guest speakers.

Discussions of the Findings

The doctoral graduates of the School of Education were mostly Seventh-day Adventists. This was particularly true among the international students. Up to 99% of them were Adventists. Such a proportion of Adventists among the student body is consistent with earlier findings by Van Nierk (1975) of the AU student body and by Faehner (1980) of the student body at Loma Linda University. These graduates were also very likely to have attended, at one time or another, an Adventist school or college.

It is apparent from the graduates' background information that the proportion of international students in the doctoral programs of the School of Education is uniquely high in the field of education. The School of Education had graduated more international students (52.75%) than American students (47.3%) since its inception

in 1974 to the 1986 Summer graduation. Such a proportion had been considered as "warped" by other university administrators and faculty members in the United States (Goodwin & Nacht, 1983). However, such a proportion appear to have not posed any serious problems nor raised misgivings among the doctoral graduates of the school of Education at AU. This is evident from their rejection of the suggestion to limit the number of international students at the doctoral level.

The doctoral students of the School of Education had been mostly (80.8%) men. This is in sharp contrast to the national norms and trend in the 1980s, where women are in greater numbers than men (National Research Council, 1981, 1982, 1983, and 1986). The low number of women international graduates also indicated that Adventist organizations had in the past been sponsoring mostly male students to pursue the doctorate at Andrews University.

The graduates' average age at graduation time was 43.4 years. They are about 10 years older than their counterparts in other American universities who usually graduate in their early 30s (National Research Council, 1978). Apparently, AU's doctoral students have been working longer before seeking the doctorate.

The chi-square analyses of 235 questionnaire items revealed only 31 statistically significant items. It is apparent that in spite of the international and multi-cultural mix of the doctoral graduates, they generally shared more things in common than they had differences. The reason for this may have been their religious backgrounds. The overwhelming majority (90.1%) of the graduates are Seventh-day Adventists. Faehner (1980) had earlier attributed the

minimum differences in the perception of campus life among multicultural college students to their common religious roots.

Differences were found in the graduates' reasons for pursuing the doctorate. The Americans expected the doctorate to open possibilities of new kinds of positions, promotions, and enhanced prestige. The international graduates indicated they were more interested in contributing to the growth of their profession. Perhaps they saw greater potential for growth of their chosen profession in their own countries. However, their shared reasons--become better practitioner; and learn new techniques, procedures, and skills--were distinctly similar to Vandermeulen's (1974) findings.

Just over half the graduates reported having received financial sponsorships for their doctoral studies. Still up to 57% of the graduates indicated having faced financial difficulties while at AU. Even if the majority of those with financial problems were not sponsored it appears that there were also sponsored students who experienced financial difficulties.

According to Ceislak (1955), several factors can contribute to international students' financial problem. The students may have underestimated their expenses due to misleading or outdated financial information they received from the universities. Sometimes the students become victims of circumstances beyond their control. Fluctuating currency exchange rates, inflation, and family emergencies are examples. Furthermore, some countries deliberately limit the amount of money anyone can take out of the country.

It is also common among Adventist students to pay their way through higher education by sheer hard work coupled with unflinching faith that God will somehow provide.

As might be expected, the American graduates knew "much" more about pertinent aspects of their studies even prior to coming to AU. The international graduates were significantly disadvantaged on knowledge about the American educational system and the kind of living arrangements available to them. This, in spite of the fact that the majority of the graduates thought AU provided them with enough information. Perhaps the kind of information provided to the international students can be improved or refined.

The majority of the American graduates (88%) were convinced the School of Education went out of its way to meet the needs of the international students. The American graduates' responses to this question showed traces of disappointment. There were perceptions among them that the School of Education was catering too much for the needs of the international students with their own needs somewhat neglected. Some even thought the doctoral programs were set up exclusively for international students. A significant proportion of the international graduates disagreed with their American colleagues.

In retrospect, the graduates thought well of their doctoral programs in the School of Education at AU and rated them accordingly. This is consistent with the findings of studies conducted in other universities in the United States (Taber, 1969; Blackwell, 1972; Nigro, 1973; Maneenil, 1982; etc.). Doctoral graduates were found to be favorably impressed by their doctoral programs long after they have graduated.

In spite of their overall satisfaction with the doctoral programs in the School of Education, only about half the graduates would attend AU if they had to do their doctorate all over again. However, the majority of them would recommend the programs to others. Perhaps the graduates continue to harbor thoughts of what might have been had they gone to other institutions or simply interested in learning the educational views and practices of other non-Adventist institutions. However, this does not take away the fact that their doctoral preparations at AU have served them well in their professional careers. Hence, their willingness to recommend the programs to others, especially those with Adventist denominational work aspirations.

The doctoral graduates assessed the following as having been valuable to them in their professional careers: dissertation work, course work, and relation to major professors or dissertation director. Similar findings have been found earlier by Shinouda (1966) at Indiana University. Furthermore, he noted that guidance and counseling by advisors were least valued. Least valuable to the doctoral graduates at AU were relations with other students, examinations, and graduate assistantships.

The international graduates did not radically differ from their American counterparts in their assessment of the relevance of their doctoral preparation to their present careers. They had indicated satisfaction with the relevance of their studies to their present careers. Moreover, the graduates indicated no regrets for their choice of major fields. They also reported having been adequately prepared for their professional duties. The international

graduates did call for more practical training, but this was hardly new among doctoral graduates (Shinouda, 1966; Nigro, 1973). What may be significant here is that earlier studies (Gollin, 1967; Susskind & Shell, 1968; Vorapipatana, 1967) had shown practical training as more relevant and valuable to international students.

There appear to be agreements among AU's doctoral graduates and in particular the international graduates that certain flexibility be afforded to international students in structuring their programs to meet their particular needs. Such a suggestion is not new among international doctoral students (Shinouda, 1966).

Conclusions

1. The School of Education serves a world-wide Adventist clientele.

2. The School of Education at AU is atypical among American Schools of Education in that it has more international students than American students at the doctoral level.

3. The high percentage of international doctoral students in the School of Education appear to have little negative impact on either the doctoral programs or the American graduates' perception of the overall programs.

4. Its typical doctoral student tends to be a male, married Seventh-day Adventist with a grade-point average (GPA) of 3.64. He is also likely to be older than his counterparts in other American universities.

5. International doctoral students attend AU mainly because it is a Seventh-day Adventist institution, whereas the American students choose to attend AU on the basis of geographic proximity.

6. The international graduates appear to have had more altruistic motives for pursuing the doctorate than their American counterparts.

7. The students usually have difficulties financing their doctoral studies, and judging from their responses, financial assistance in such forms as scholarships or graduate and research assistantships were either lacking or not available to them then.

8. The doctoral programs were compatible with the pre-arrival expectations of the majority of the graduates.

9. The graduates were generally satisfied with their doctoral programs. This included favorable ratings of the faculty, facilities, quality of instruction, dissertation writing process, and the programs' contributions to acquired competencies. Consequently, up to 94% of the graduates said they would be happy to recommend the programs to others.

10. The graduates also believed the doctorate was worth their effort, energy, and money.

11. The American graduates perceived the School of Education as catering adequately to the needs of the international doctoral students. Their international counterparts, however, were less inclined to agree.

12. The majority of the international doctoral students go on to work for Seventh-day Adventist organizations, often in positions of administrative responsibilities.

13. Virtually all the graduates are currently working full-time, and the vast majority of them indicated satisfaction with their present positions.

14. In terms of professional development, the graduates benefited most from their dissertation work, course work, relation to major professor or director of dissertation, and independent reading. They were least benefited from their relation to other students, preparation for examination, graduate assistantship, and research assistantship.

15. The international graduates tended to gain greater social acceptance as a result of their doctorate, but then they are also paid less than their American counterparts.

16. For the majority of the graduates the doctorate has not resulted in any economic gains, but then this was not an important reason for pursuing the doctorate in the first place.

17. The majority of the graduates were satisfied with the relevance of their academic preparations to their professional careers.

18. The minimal number of differences between the international and American graduates retrospective appraisals of their doctoral programs may be largely due to two common factors among them: their Seventh-day Adventist backgrounds and their current employment with the Adventist denomination.

19. This study was based on the theoretical concept that feedback from the "consumers" of education is essential to the operation and survival of educational institutions. Moreover, it is a basic premise of the study that feedback is particularly effective when differentiated to account for the diversity of a multinational student body. Results from the graduates' feedback indicated several significant differences that should become the basis for adjustments

in the institution's continued effort to respond to the needs of its multinational student body.

Recommendations

The following three sets of recommendations are based on the findings of this study. The first set of recommendations are directed at institutions of higher learning with a "critical mass" of international students at the doctoral level. The second set are specific recommendations for the School of Education at AU, and the third set are recommendations for further studies.

Institutions of Higher Learning

1. The university should make an effort to know its international doctoral students in terms of their expectations, needs, problems, difficulties, etc. It should realize that by admitting these students into its campus, the institution assumes the responsibility of meeting their needs and expectations.

2. The university must recognize the fact that international students tend to converge on an educational institution because of certain unique characteristics or program offerings. The institution should set out to properly identify these uniquenesses and make appropriate decisions. The institution can capitalize and strengthen these uniquenesses to improve its standings and market among international students.

3. Institutions or programs with a significant proportion of international students should have global perspectives of its stated philosophy, goals, and objectives.

4. Course offerings should reflect the global outreach. Courses that are appropriate in content to the needs of international students either by their specific countries of origin or world region should be made available.

5. The program should provide for flexibility in course selection. Provisions should be made for more electives, instead of rigid course requirements, whereby students can more suitably structure their programs according to their individual and national needs.

6. Financial information given to prospective students should be as detailed and up-to-date as possible. The details should include estimates of related expenses such as transportation, food, entertainment, clothing, extra expenses for families, etc. Judging from the age and marital status of the graduates, it is also reasonable to conclude that some doctoral students have school-age children. They should be informed about the schools in the neighborhood and their cost.

7. Considerations should be made regarding offering classes with theoretical orientations. Classes which delve in specifics can become provincial. However, provisions should be made for practical applications of theories later.

8. Considerations should also be given to the possibility of increasing course offerings, especially in the area of international education. This should be concurrent with the increased number of electives the students can take.

9. More international faculty members are needed. If this is not feasible, then individuals who are knowledgeable about other

countries' educational systems and are able to put education into an international perspective or dimension should be considered.

10. Institutions should invest resources into making sure their degrees are readily accepted or recognized by the international students' home countries.

11. Uprooting oneself to go and study in another country can be an anxious and trying experience. Adequate information and orientation must be provided to these students. Information should be made simple and clear. The information and orientation procedures should also be regularly updated and refined.

12. Follow-up studies on the graduates should be conducted on a regular basis on such items as utilization of skills and the relevance of the doctoral programs to their careers. Comparative study on the results of these studies can be conducted to gain greater insight into the direction and progress of the programs.

13. The feasibility of conducting overseas extension schools or classes to meet students on their own turf should be explored. The efforts should prove valuable for both the students and the institutions.

Andrews University

1. Information that the School of Education provides to prospective students should include statements re-emphasizing its mission to serve the Seventh-day Adventist church. It should be pointed out that the majority of its doctoral graduates have gone on to serve the Adventist church. This is not to discourage individuals with career aspirations outside of the Adventist denomination, but rather to provide them the opportunity to sort out their priorities

and goals realistically before embarking on an expensive study venture to Andrews University.

2. The School of Education should address the concern about the lack of respect and recognition of its doctoral degrees among some Adventist circles in North America. While this was not an overwhelming concern among the graduates, there were indications of its existence. Perhaps further investigation into this problem is merited.

3. There were a few but consistent complaints about the shifting policies and requirements of the doctoral programs. This should be addressed as well.

4. Consideration should be given to providing more opportunity for interactions among the doctoral students. The primary purpose should be to encourage them to share their experience as doctoral students, especially in writing the dissertation.

5. In view of the graduates' perception that their professors were overloaded, consideration should be made to reduce the work load of the professors, perhaps by hiring more faculty members.

6. The School of Education should continue its policies on admission for international doctoral students. It should not be concerned by the "warped" proportion of international students in its programs. While the question of meeting their needs elicited opposing views between the two groups, the majority of the graduates saw no reason to limit the number of international students in the doctoral programs.

7. The School of Education should have greater commitments to financial aid in the form of graduate assistantships. Very few, if any, of the graduates indicated having benefited from such services.

8. Consideration should be made to lessen or eliminate the emphasis on examinations at the doctoral level. According to the graduates, examinations contributed very little to their overall professional development.

9. There are indications that the international doctoral students feel taken for granted as faithful Seventh-day Adventist church members. They miss the personal touch and care of their pastors and even fellow church members. There were complaints of no pastoral visitations. The campus pastoral ministry should set up a network of pastors whose function is to visit with graduate students. The services of prospective pastors in the Theological Seminary can be utilized in this ministry.

Further Studies

1. In view of the lack of studies of this nature, it is recommended that similar studies be conducted with a wider population sampling, preferably on a nation-wide basis.

2. Similar studies could also be conducted for other disciplines with a substantial number of international students.

3. Studies should be conducted to ascertain variables that contribute to the differences between international and American doctoral graduates' perceptions of their programs. Variables such as geographic, cultural, linguistic, economics, and racial backgrounds; academic performance; major fields; gender; etc., should be

considered. The utilization of other statistical analyses such as factor analysis could be explored for such studies.

4. The perception of faculty and other university personnel about their doctoral programs could be investigated and compared with those of the graduates'. Difference in perception could indicate areas that needs the most attention.

5. Similar studies should be undertaken for concerned universities periodically, perhaps every 5 to 10 years. Such studies should take into consideration changes, additions, progress, etc. that have taken place during the intervening period.

6. In view of the large number of international students on American campuses, studies should be conducted to determine motives and circumstances that led them to this country instead of to other campuses in other countries.

7. Research that addresses this relatively new phenomenon of multinational student bodies at the graduate level is lacking. It is hoped and recommended that the findings of this study can become the springboard for a more comprehensive theoretical research in this field. The purpose of such theory-based research would be to explain more systematically how educational institutions can respond more effectively to changing environments brought upon by increasingly diverse student population.

APPENDICES

APPENDIX A
QUESTIONNAIRE MAILED TO GRADUATES

QUESTIONNAIRE TO DOCTORAL GRADUATES

This study attempts to investigate possible differences between the international and American doctoral graduates' appraisals of the doctoral programs of the School of Education at Andrews University (AU). Therefore, we are interested in how you, in retrospect, would appraise the doctoral programs of the School of Education (formerly Department of Education) at Andrews University.

INSTRUCTIONS

On most items you only have to check mark the appropriate spaces. If spaces provided for your responses to the open-ended questions are not adequate, please turn to the back page and continue there, identifying your answers with the number of the question, or add one or more sheet of paper for the space needed. If you have comments or suggestions not fitting the format of the questionnaire, please add them at the end.

Please note that your identity and responses will be kept strictly confidential.

1. Present employment status. Check the phrase which best describes your present status.

☐ Employed full time.
☐ Employed part time. _____ per cent of full time.
☐ Unemployed temporarily.
☐ Unemployed due to poor health or physical reasons.
☐ Retired not seeking employment.
☐ Full time housewife.
☐ Other(s). Please specify: _____

2. Present position or rank _____

Name of Employer(s) _____
 Date started _____

3. a) What led you to decide to pursue a doctorate? (Please check all that apply)

☐ Attraction of new kinds of positions.
☐ Better opportunity for promotions.
☐ Desire to be a better practitioner in your field.
☐ Enhanced prestige associated with a doctorate.
☐ Desire to learn new techniques, procedures, and skills in your field.
☐ Desire to keep up-to-date in your field.
☐ Stimulation of university setting.
☐ Opportunity for greater self-fulfillment.
☐ Fascination with research and experiment.
☐ Desire to contribute to the growth of your profession.
☐ Appeal of higher salaries.
☐ Desire to work with college-age students.
☐ Sense of inadequacy with pre-doctoral knowledge and skills.
☐ Encouragements by your employer(s).
☐ Other(s). Please specify _____

- b) What factor influenced you the most? (Please circle one of the above)

4. a) What factors influenced your decision to pursue the doctorate at Andrews University?
(Please check all that apply)

☐ Housing availability.
☐ Lived near Andrews University.
☐ Availability of desired programs.
☐ Availability of financial aids.
☐ Size of the University.
☐ Advanced credits earned or applicable at AU.
☐ Studied at AU before.
☐ SDA (Seventh-day Adventist) University.
☐ Reputation of the School of Education.
☐ Academic reputation of the University.
☐ Reputation of individual staff members.
☐ Cost consideration.
☐ Racial/Ethnic makeup of the University.
☐ Family tradition to attend AU.
☐ Influenced by friends.
☐ Contact with AU personnel.
☐ Suggestions from financial sponsor(s).
☐ Other(s). Please specify _____

- b) What factor influenced you the most? (Please circle one of the above)

5. a) Please check the financial resource(s) which made your doctoral study possible.

☐ Full-time employment while studying.
☐ Part-time employment while studying.
☐ Fellowship.
☐ Assistantship.
☐ Study leave with pay.
☐ Working spouse.
☐ Sponsorship from S.D.A. organization(s).
☐ Savings.
☐ Gifts and inheritance.
☐ Loans.
☐ G.I. Bill.
☐ Other(s). Please specify _____

- b) Which of the above sources was most significant in amount? Please circle one.

6. a) Before coming to Andrews University how much did you know about the following?

	Nothing	Little	Some	Very much
Quality of graduate education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunity for study in your field.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching methods.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counselling services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Living arrangements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
American Educational system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- b) Did AU provide enough information or orientation regarding the items listed above (6. a)?

☐ No; ☐ Uncertain; ☐ Yes.

7. What misinformation or wrong impression, if any, did you have about graduate education at AU?

8. Does a Ph.D. degree in education have a higher prestige value in your country than an Ed.D. degree? ☐ No; ☐ Uncertain; ☐ Yes.

9. Would it have been possible for you to earn your doctoral degree in your own country? i.e. if you were an international student at AU.

_____ No; _____ Uncertain; _____ Yes

10. What were the greatest obstacles you had to overcome in the completion of the requirements for the doctorate? Please check no more than two:

_____ Academic.
 _____ Social.
 _____ Financial.
 _____ Cultural.
 _____ Personal.
 _____ Other(s). Please specify _____

11. To what extent did you get adequate and helpful guidance in overcoming these obstacles from:

	None	Little	Some	Considerable
Chairman of your dissertation committee.	_____	_____	_____	_____
Dissertation advisor if different from chairman . . .	_____	_____	_____	_____
Other members of your dissertation committee	_____	_____	_____	_____
Dean of School of Education	_____	_____	_____	_____
Department Chairman	_____	_____	_____	_____
Other members of the faculty	_____	_____	_____	_____
Other doctoral students/friends	_____	_____	_____	_____
Other(s). Please specify _____	_____	_____	_____	_____

12. How was your dissertation topic really selected?

_____ Dissertation advisor selected it.
 _____ I selected it.
 _____ The selection was done jointly.

13. How closely did your dissertation advisor work with you: i.e. how much attention, direction, supervision, etc, did he/she give to the development of your dissertation?

_____ Close and continuous supervision.
 _____ Less, but sufficient help.
 _____ Very little help: I was left to work mostly on my own.

14. How would you describe your feeling about the experience of writing the doctoral dissertation?

_____ An enlightening intellectual experience.
 _____ A tedious drudgery; not worth the effort, but necessary for the degree.
 _____ In between -- elements of both the above.
 _____ Other(s). Please specify _____

15. Quality of instruction. Indicate below in percentages how you would categorize the quality of instruction in your doctoral courses in education. Total should equal 100%.

Courses with superior instruction	_____ %
Courses with better than average instruction	_____ %
Courses with average instruction	_____ %
Courses with below average instruction	_____ %
Courses with poor instruction	_____ %
	=====
Total	100 %

Comment, if you wish, on any subject area in which you feel the instruction was particularly good or poor:

Good: _____

Poor: _____

16. From your knowledge of doctoral programs in Education of other universities, how would you rate the doctoral programs of the School of Education at Andrews University?

☐ One of the best
☐ Above average
☐ Average
☐ Below average
☐ Poor

17. How would you rate the faculty of the doctoral programs of the School of Education?

	Poor	Fair	Average	good	Excellent
Sensitivity to students' needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of their fields.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching ability.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Awareness of current trends in their fields. . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Publishing activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other(s). Please specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. What are the greatest strengths of the doctoral programs of the School of Education at Andrews University?

19. What are the greatest weaknesses of the doctoral programs of the School of Education at Andrews University?

20. To what extent has your graduate education at Andrews University contributed to the following?:

	None	Little	Some	Much
A broader concept of educational problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intellectual growth and stimulus.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural and aesthetic experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poise, self-confidence and balance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More satisfactory social relations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Please indicate your level of satisfaction with the following items in connection with your doctoral study using the scale below:

1	2	3	4	5
Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied

☐ Your present economic status.
☐ AU's job placement services.
☐ The extent with which the doctoral programs met your personal educational objectives.
☐ Educational facilities such as classrooms, study areas, and library.
☐ The number of faculty and staff.
☐ The quality of the faculty and staff.
☐ Availability of financial assistance.
☐ The relevance of your doctoral preparation to your present career or profession.
☐ Faculty-student relationships.
☐ Student-student interaction.
☐ The extent with which the doctoral programs measured up to your pre-arrival expectation.

22. From the following list, please select the three aspects of your doctoral programs which contributed the most to your professional development. Rank the most valuable aspect 1, the second most valuable 2, and the third most valuable 3.

☐ Course work.
☐ Independent readings.
☐ Dissertation work.
☐ Graduate assistantship.
☐ Research assistantship.
☐ Preparation for examinations.
☐ Relation to your major professor or director of dissertation.
☐ Relation to other students.
☐ Other(s). Please specify _____

23. From the following list, please select the three aspects of your doctoral program which contributed the least to your professional development. Rank the least valuable aspect 1, the second least valuable 2, and the third least valuable 3.

☐ Course work.
☐ Independent readings.
☐ Dissertation work.
☐ Graduate assistantship.
☐ Research assistantship.
☐ Preparation for examinations.
☐ Relation to your major professor or director of dissertation.
☐ Relation to other students.
☐ Other(s). Please specify _____

24. Schools of education have often been criticized for having needless duplication of course content in their curricula. Did you in your own program find such duplication of content in your courses at Andrews University?

☐ No; ☐ Can't say; ☐ Yes

If the answer is yes, please rate the extent of the duplication on the scale of 1 to 10, where 1 indicates little and 10 indicates considerable: _____

Please describe briefly, the areas of duplication: _____

25. Did you have a clear understanding of the goals and objectives of the doctoral programs?

☐ No; ☐ Uncertain; ☐ Yes.

Please elaborate on your response if you wish _____

26. Did you perceive any indications that the School of Education was attempting to meet the needs of its international doctoral students

☐ No; ☐ Uncertain; ☐ Yes

Please elaborate on your response if you wish _____

27. In your opinion were the doctoral programs sufficiently geared to meet the needs of its multinational student body?

☐ No; ☐ Uncertain; ☐ Yes

Please elaborate on your response if you wish _____

28. Check the method or methods by which you obtained your first position after receiving the doctorate:
- ☐ Held position before or during graduate work.
 - ☐ Contact through major advisor or department head.
 - ☐ Through the university placement service.
 - ☐ Through commercial placement bureau.
 - ☐ Through advertisement in a professional journal.
 - ☐ On own initiative.
 - ☐ Other(s). Please specify _____
29. Position satisfaction. How well pleased are you with your present position professionally? Check one response.
- ☐ Thoroughly satisfied, no desire to change.
 - ☐ Satisfied but would consider a change.
 - ☐ Somewhat dissatisfied, would change if I could.
 - ☐ Thoroughly dissatisfied, actively seeking to change.
30. Professional growth. In your opinion, has there been a change in your status because of the doctorate?
- | | | | |
|---------------------------|------------------------------|-------------------------------------|------------------------------|
| Promotion in rank? | <input type="checkbox"/> No; | <input type="checkbox"/> Uncertain; | <input type="checkbox"/> Yes |
| Increase in salary? | <input type="checkbox"/> No; | <input type="checkbox"/> Uncertain; | <input type="checkbox"/> Yes |
| Acceptance by colleagues? | <input type="checkbox"/> No; | <input type="checkbox"/> Uncertain; | <input type="checkbox"/> Yes |
| Acceptance socially? | <input type="checkbox"/> No; | <input type="checkbox"/> Uncertain; | <input type="checkbox"/> Yes |
31. Advancement. Check the extent to which you believe you have advanced in rank within the possibilities of your present post:
- ☐ As far as possible in this position.
 - ☐ Have made good progress, but may advance further in present post.
 - ☐ Have recently taken position and feel there is much opportunity to advance.
 - ☐ Have made little or no progress or advancement in this position.
 - ☐ No prospect for advancement.
32. Division of time. Estimate the per cent of time you spent in each of the following categories as part of a typical work week during the past year. (Total should equal 100 %.)
- ☐ Administrative.
 - ☐ Teaching and preparation.
 - ☐ Research, writing and creative work.
 - ☐ Individual case work, counselling with students, etc.
 - ☐ Other(s) not mentioned above. Describe if more than 20 per cent of total. _____
-
- 100% Total
33. Choice of major field. Is your present position one for which particular preparation was made in your:
- a) Major field? ☐ No ☐ Yes b) Minor/cognate field(s)? ☐ No ☐ Yes.
34. In light of your work since the doctorate, do you wish that you had chosen a different major field for your graduate study? ☐ No ☐ Yes. If your answer is yes which major field would you have chosen? _____
35. Please indicate the extent to which you have engaged in the following activities:
- ☐ Number of books or monographs published.
 - ☐ Number of articles published in Adventist journals, newsletters, etc.
 - ☐ Number of articles published in other journals, newsletters, etc.
 - ☐ If you are in college or university teaching, indicate the number of committees on which you are now serving.
 - ☐ Number of state or national committees on which you are now serving.
 - ☐ Number of professional organizations in which you hold membership.

36. How much public speaking do you do in your professional field?

___ none ___ little ___ some ___ much.

37. Financial status. Earned income. Please indicate your earned income during the past one year. Include salary, consultant fees, royalties and other income from your professional activities, but not from investments and other sources. If you have not yet been employed for a full year, estimate the yearly income. (In US Currency)

___ Less than \$10,000	___ \$16,000 to \$17,999	___ \$24,000 to \$25,999
___ \$10,000 to \$11,999	___ \$18,000 to \$19,999	___ \$26,000 to \$27,999
___ \$12,000 to \$13,999	___ \$20,000 to \$21,999	___ \$28,000 to \$29,999
___ \$14,000 to \$15,999	___ \$22,000 to \$23,999	___ \$30,000 and above

38. Salary. In your opinion, how much greater is your yearly income as a result of having earned a doctorate?

___ none ___ little ___ somewhat ___ considerably.

39. Do you feel that the expense in time, effort, and money for your doctorate was justified?

___ No; ___ Uncertain; ___ Yes.

40. Do you feel that your doctorate from an American Institution has the same prestige value as a comparable degree from European countries?

___ No; ___ Uncertain; ___ Yes.

41. Do you feel that your doctorate from Andrews University has the same prestige value as a comparable degree from other American universities?

___ No; ___ Uncertain; ___ Yes.

42. If you were starting your graduate work in education over again, and had your choice of any graduate school in the United States, would you again choose Andrews University?

___ No; ___ Uncertain; ___ Yes.

Why? _____

43. Would you recommend the doctoral programs of the School of Education at AU to others?

___ No ___ Yes

Please elaborate _____

44. As you consider your doctoral program in retrospect, where, if at all would you suggest changes in the aspects listed below. Please check in the space that most closely express your feeling:

	Would relax requirements	OK as is	Would increase requirements	No opinion
Qualifications for admission. . . .	_____	_____	_____	_____
Course requirements.	_____	_____	_____	_____
Research training.	_____	_____	_____	_____
Dissertation.	_____	_____	_____	_____
Independent work.	_____	_____	_____	_____
Major field.	_____	_____	_____	_____
Minor fields.	_____	_____	_____	_____
Supervised college teaching. . . .	_____	_____	_____	_____
Residence requirements.	_____	_____	_____	_____
Final defense of dissertation. . .	_____	_____	_____	_____
General quality of doctorate. . . .	_____	_____	_____	_____

45. Do you have professional duties and responsibilities for which you feel your graduate preparation at Andrews University was inadequate and for which you feel preparation should have been adequate?

___ No ___ Yes. If answer is yes, please specify: _____

46. What honors, awards, grants, or fellowships have come to you since the doctorate? Please explain number, value, and details:

47. What suggestion or criticism do you have regarding the admission requirements?

48. What suggestion or criticism do you have regarding the written comprehensive examination?

49. What suggestion or criticism do you have regarding the spiritual life/experience on AU campus?

50. What suggestion or criticism do you have regarding the final oral examination in which you defended your dissertation?

51. What suggestion do you have to make the dissertation experience more valuable?

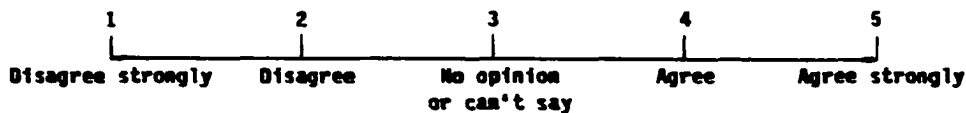
[illegible]

Usefulness in Present Position

1. Ability to locate, read, interpret and apply research to educational problems. _____
2. Ability to design and carry on research. _____
3. Ability to organize and communicate ideas and information by effective writing. _____
4. Ability to exert leadership in matters of professional and community cooperation. _____
5. An understanding of your major area of specialization. _____
6. Knowledge in your minor area of specialization in education. _____
7. Knowledge in your minor area outside the education field. _____
8. Ability to use and interpret statistical data and procedures. _____
9. Return to the foregoing list and indicate in column 4 the extent to which your doctoral programs at Andrews University contributed to each of the competencies, using the following scale for rating: (0) Missing from your program, (1) Unsatisfactory, (2) Poor, (3) Fair, (4) Good, (5) Excellent.
10. Return once more, please, to the same list above and circle the number (#) of the competencies which you feel should be acquired during the doctoral work regardless of whether you acquired them or not in your own program.

CRITICISM AND SUGGESTED CHANGES

There follow some specific criticisms and suggested reforms that have been made over the past few years concerning graduate education in general. They do not represent the view of the investigator, but are compiled from many sources. Please go through the questions once, and circle your reaction to the statements as they relate to the doctoral programs of the School of Education at Andrews University in the order in which they are listed. Please do not go back and make changes in your responses. The investigator is interested in your first reaction. Remember that your responses will be confidential.
(Please use the scale below:)



- | | | | | | |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | Graduate students should be encouraged to select courses in several widely separated non-major fields instead of the traditional minor(s)/(cognate). |
| 1 | 2 | 3 | 4 | 5 | Foundation courses in such broad fields as the humanities, physical sciences, and the social sciences should be carried with graduate credit to enable doctoral candidates to round out their general education in areas not included in earlier study. |
| 1 | 2 | 3 | 4 | 5 | A basic course in statistics should be required only when needed in the doctoral candidate's research program. |
| 1 | 2 | 3 | 4 | 5 | Doctoral candidates preparing for college teaching do not get enough training in teaching during their doctoral programs. |
| 1 | 2 | 3 | 4 | 5 | Doctoral programs should be "loosened" by putting more responsibility upon the student and giving him greater voice in outlining his course of study. |
| 1 | 2 | 3 | 4 | 5 | There is too little provision for social contacts among graduate students, creating isolation and unhappiness. |
| 1 | 2 | 3 | 4 | 5 | Graduate students are not well counselled at the beginning of their program with the result that they often do not know just what they must do to complete the degree. |
| 1 | 2 | 3 | 4 | 5 | Doctoral programs should be "tightened" and all students put through a stringent program of study much as medical and law schools now do. |
| 1 | 2 | 3 | 4 | 5 | Doctoral training for research is inefficient and wasteful of both students and faculty because few recipients of the degree become productive research scholars. |
| 1 | 2 | 3 | 4 | 5 | The doctoral dissertation is too often a mere exercise rather than a real intellectual experience and a contribution to useful knowledge. |
| 1 | 2 | 3 | 4 | 5 | Doctoral work is too much concerned with professional training in skills rather than with academic work oriented to scholarship. |
| 1 | 2 | 3 | 4 | 5 | The final oral exam defending the dissertation has become a mere ritual and serves no useful purpose. |

- 1 2 3 4 5 The graduate schools give undue stress to research and neglect the task of properly preparing college teachers.
 - 1 2 3 4 5 Doctoral programs are too specialized and lacking in breadth.
 - 1 2 3 4 5 A basic fault with the graduate program is that faculty members consider their own research, consulting work, administrative duties, etc., as their main responsibility, with the needs of students coming second.
 - 1 2 3 4 5 The doctoral programs, as they are now organized, create too much needless anxiety in many students.
 - 1 2 3 4 5 The basic course in curriculum is necessary in the program only for students who expect to go into school work at the elementary or secondary level.
 - 1 2 3 4 5 Doctoral candidates are too often encouraged or allowed to undertake dissertation projects that are too ambitious for completion within a reasonable length of time.
 - 1 2 3 4 5 The course in measurement should be required only for students who will have definite use of measurement techniques and practices in their chosen major field.
 - 1 2 3 4 5 The requirement of a basic course in philosophy of education is not necessary for graduate students whose major field and dissertation are not specifically concerned with philosophy.
 - 1 2 3 4 5 The basic course in advanced educational psychology is not needed for students whose field will not take them out of active teaching.
 - 1 2 3 4 5 The doctoral dissertation should be regarded primarily as a training exercise in research rather than as a serious and original contribution to knowledge.
 - 1 2 3 4 5 Some portions or forms of the dissertation should be published in a professional journal before the doctoral candidate is granted the doctorate degree.
 - 1 2 3 4 5 Doctoral programs for foreign students should be more flexible in keeping with their varying national needs.
 - 1 2 3 4 5 All doctoral candidates should be required to do some teaching under supervision during their doctoral work.
 - 1 2 3 4 5 Two programs should be set up for the doctorate--one for researchers and one for teachers, with research left out of the program for teachers.
 - 1 2 3 4 5 There should be two sets of standards: one for foreign (international) students, and another for the American students.
 - 1 2 3 4 5 The number of faculty in the doctoral programs should be increased.
 - 1 2 3 4 5 The faculty members are generally not accessible or available to the students
 - 1 2 3 4 5 The number of international students at the doctoral level should be limited.
-

APPENDIX B
CORRESPONDENCE WITH DR. GERALD DOTY



ANDREWS
UNIVERSITY

Garland Apt. A-11
Berrien Springs,
Michigan 49103.

March 10, 1986

Dear Dr. Doty,

I am a doctoral student at Andrews University, Berrien Springs, Michigan. Presently I am conducting a study to compare the international (foreign) and American doctoral graduates' appraisal of their program in the School of Education at Andrews University. This study will constitute my doctoral dissertation.

It has been determined that the doctoral dissertation questionnaire that you developed for your study of the graduates' appraisal of the doctoral program of the School of Education at Indiana University is suited for my study with the following proposed modification:

1. Addition of items pertaining to international students. (you will recall, of course, that your study excluded this population.)
2. Addition of items that deal specifically with Andrews University as a private and church operated university.
3. Updating of items such as item no. 19 to reflect the conditions of the 1980's, and replacing "Indiana University" with "Andrews University".
4. Omission of those items where data are available from Andrews University's Office of Institutional Research.

It is in this context that I would like to request your permission for the use of your questionnaire in my study.

Thank you for your kind and generous help.

Sincerely yours,

Libin Kutup Rampasan
(Doctoral candidate)

Edward A. Streeter, Ed.D.
Chairman, Department of
Educational Administration
and Supervision.

GERALD H. DOTY
408 King Street
Missoula, Montana 59801
(406) 542-2280

March 24, 1988

Mr. Edwin H. Kampasun
Garland Apt. A-11
Barrien Springs, MI 49105

Dear Mr. Kampasun:

I have your letter of March 10, requesting my permission to use the questionnaire from my doctoral dissertation.

You have my permission to use all or parts of the questionnaire for your study without any remuneration to me. Also, feel free to use anything else from my study that may be of use in your study.

I am not sure of the copyright status of the study with respect to Dissertation Abstracts of Ann Arbor, MI, which provides copies. Whether they have any right to restrict use, I do not know. Your advisor should know the answer to that.

Best wishes to you as you undertake the hardest part of your doctoral work. My recollection of the dissertation work was that the dissertation took more time and effort than all the course work. I wondered sometimes whether it was worth all the effort and expense, but it was a job I needed to do, and I was glad that I kept at the job until it was finished. Don't make the mistake of putting it off!! Mine was written during a year when I had a full time teaching schedule, and had to do the writing late at night or early in the morning.

Cordially yours,

Gerald H. Doty, EdD.
Prof. of Music, Emeritus
University of Montana

APPENDIX C
LETTER OF INTRODUCTION FROM THE DEAN



February 9, 1987

Dr. *first name* *last name*
* Address1*
* address2*
* Address3*

Dear Dr. *Last name*:

Greetings from the School of Education!!

Mr. Libin Kutup Rampasan, one of our doctoral students, is undertaking a follow-up study of all the doctoral graduates of the School of Education here at Andrews University. His study attempts to investigate possible differences between the International and American doctoral graduates' perception of our doctoral programs. We feel that the findings of this study will be important to the School of Education's efforts to serve its world-wide constituency.

Enclosed is Libin's questionnaire. I shall appreciate it, and I am sure he will too, if you would be kind enough to find time in your busy schedule to give your thoughtful and critical attention to the questionnaire. I am sure that you have personally experienced the critical importance of the time factor regarding the doctoral dissertation.

We appreciate your continued interest and loyalty to your alma mater. Thank you, and may God richly bless you in your work *IF place="Michigan"*here*ELSE*there*ENDIF* in *place*.

Sincerely yours,

E. Stanley Chace; Ed.D.
Dean, School of Education

Enc: Questionnaire

APPENDIX D
COVER LETTER FROM THE RESEARCHER

500 Garland Apt. A-11
Berrien Springs, Mi 49103
U. S. A.

February 9, 1987

Dr. <first name> <last name>
< Address1>
< address2>
< address3>

Dear Dr. <Last name>:

The enclosed questionnaire is part of a study to investigate possible differences between the international (foreign) and American doctoral graduates' appraisals of the doctoral programs of the School of Education here at Andrews University. We are, therefore, interested in your retrospective appraisal of the School's doctoral programs. Some of the data needed for this study have already been obtained through the University. Your thoughtful responses will help us complete this study.

It takes about thirty five minutes of your precious time to complete this questionnaire. We realize your busy schedule and you may not have that much of extra time at any given day. In which case, the only suggestion that we could offer is that you take ten minutes a day to answer a section of the questionnaire, and you will be done in two to three days.

DIRECTIONS: In most cases you only have to check mark or circle the appropriate spaces as directed. If spaces provided for your responses to the open-ended questions are not adequate, please feel free to use the back page. We only request that you identify your responses with the number of the question(s) being responded to. Please remember that your identity and responses will be kept anonymous and confidential.

< IF usornot="yes">Please use the enclosed envelop to return the completed questionnaire to us as soon as possible. <ELSE>Please use the enclosed envelope to return the completed questionnaire as soon as possible. Enclosed is a brand new US\$1.00 bill to cover for the air mail postage. It was not feasible for us to enclose a US Post paid envelop to <country>. This is the next best thing that we could do. We hope this amount is sufficient.<ENDIF>

We look forward to your important responses. And thank you very much for your generous help.

Yours sincerely,



Libin Kutup Rampasan
Ph.D. Candidate

APPENDIX E
FOLLOW-UP LETTER

500 Garland Apt. A-11,
Berrien Springs, Michigan 49103,
U. S. A.

March 9, 1987

Dr. *First name* *Last name*
* Address1*
* IF Address2* *Address2*
* ENDIF* *state*, *country*

Dear Dr. *Last name*

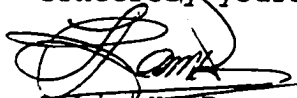
When we wrote to you on *DATE*, we enclosed a questionnaire designed to elicit information on how you, as a doctoral graduate of Andrews University, would appraise the doctoral program that you went through here at Andrews University.

As of today we have not had the pleasure of hearing from you.

Enclosed is another copy of the questionnaire and a return envelop. We would indeed appreciate it very much if would kindly complete this questionnaire and return it to us as soon as possible.

If you have already completed and returned to us the questionnaire that we first sent to you, please ignore this tiny reminder and accept our heartfelt gratitude.

Sincerely yours



Libin K. Rampasan

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